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## **Adapting to living with diabetes**

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**Contents**

Acknowledgements.....4

Cognitive Behaviour Therapy: An Introduction.....5

How to tackle negative or unhelpful thoughts..... 8

How anxiety affects your diabetes..... 24

Healthy eating in diabetes..... 30

Problem Solving..... 38

Becoming more assertive..... 42

Conclusions..... 49

Evaluation..... 51

Reading list..... 52



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## **Cognitive Behaviour Therapy for Diabetes: An Introduction**

Since you were diagnosed with diabetes, advice from health professionals will probably have focused on medication, diet and exercise. Following this strict regime can be difficult and at times may appear impossible. These individual difficulties are rarely addressed fully in the hospital out-patient clinic.

In recent years a treatment called cognitive behaviour therapy (CBT), has been found to be helpful in diabetes. CBT is based on the idea that feelings, thoughts, behaviours and physical responses are interconnected. All of these responses can and will affect your blood sugar control. Using a range of CBT techniques we will help you address factors that may be contributing to difficulties with your diabetes care. You will probably have already developed a number of ways of coping with and controlling your diabetes.

The aim of CBT is to:

- a) build on your own coping techniques.
- b) offer you new techniques to improve your quality of life, your diabetes self-care and your blood sugar control.
- c) reduce the risk of long term diabetes-related complications.

### *What does treatment involve?*

The course of treatment is tailored to each person's individual needs. The first step is to build up a detailed picture of any difficulties you may be having. You and your nurse therapist will then work out together what problem or difficulty to address first. This should always proceed at a pace you can comfortably cope with. Interventions may include: attending to dietary, exercise and life style related behaviours; anxiety, worry and stress management; challenging unhelpful or negative thoughts; strategies for eliciting support from friends and family; assertiveness training.

### *Treatment Sessions*

This form of treatment is fairly structured, and takes place over 8 sessions, at weekly or fortnightly intervals. Initially, there will be an assessment session, in which your nurse therapist will gather as much information as she or he can about how diabetes is affecting

you at the moment. This is also a time when you (and your friends or relatives) can ask any questions or settle any doubts you may have about treatment.

The sessions will last up to one hour. Most people begin with weekly sessions, and many then prefer to come at fortnightly intervals: this can be negotiated with your nurse therapist. You will be seen individually, by the same nurse therapist, for the whole duration of your treatment. Regular attendance is very important, in order to ensure that the momentum and consistency of treatment is maintained. You can, of course, go on holiday, and this is often a good opportunity to practice your treatment programme in a different setting. However, as far as possible, try to avoid too many unplanned absences.

At each session, you will set targets for the week ahead. At the beginning of the session, you and your nurse therapist will review your progress so far, and discuss any difficulties that may have arisen. During the session, you will decide what areas you wish to work on during the coming week. You and your nurse will decide upon specific "homework" tasks, and on ways of achieving them. After the assessment, you may want to *identify some specific personal goals* that you would like to work towards at the end of treatment.

To help you and your nurse therapist work effectively together and keep track of your progress, you will be asked to record your homework in a progress diary and bring it to each appointment. The "homework" and the things that you do yourself are extremely important aspects of treatment.

### *Measurement of Progress*

Part of CBT involves frequent evaluation of progress, to ensure that the treatment is going in the right direction and that our interventions are effective. We will also ask you to complete a "package " of questionnaires that measure the severity and impact of your illness, some of which you may have filled in already. You will be given the questionnaire package to fill in (1) at the beginning of treatment, (2) at discharge and (3) at follow-up. Unfortunately, because you are participating in a research trial, this does mean there are rather a lot of questionnaires to complete. We apologise for this, but by completing them you help us evaluate the effectiveness of the treatment we offer.

### *When Treatment Ends*

One of the most important aims of CBT is for you to become your own therapist, and to continue with your own treatment programme once the regular treatment course ends. This is very important, and will enable you to improve upon the gains you have made, even when active treatment has ended. After active treatment is completed you will be seen by an independent assessor. You will also be seen at regular intervals during treatment by the study co-ordinator. These follow-ups are intended to determine how much you feel you have benefited from treatment and how much you have improved your control.

### *The role of family and friends*

Although this is largely a self-directed treatment, in which you carry out most of the work yourself, many people find it helpful to involve a close friend or relative as a "co-therapist" or "co-helper". Really all this means is that you have someone available who understands what you are doing in treatment, and who you can talk things over with. Their main role is supportive, and this can be very important since CBT can require quite a lot of determination. There may be times when you feel like giving up, or when you feel as though you are making no progress. The presence of someone who can give you encouragement and reinforce your achievements can be invaluable at such times. Although you may not wish to involve other people in your treatment directly, it can be useful for people close to you to know what it involves, so that they can be supportive.

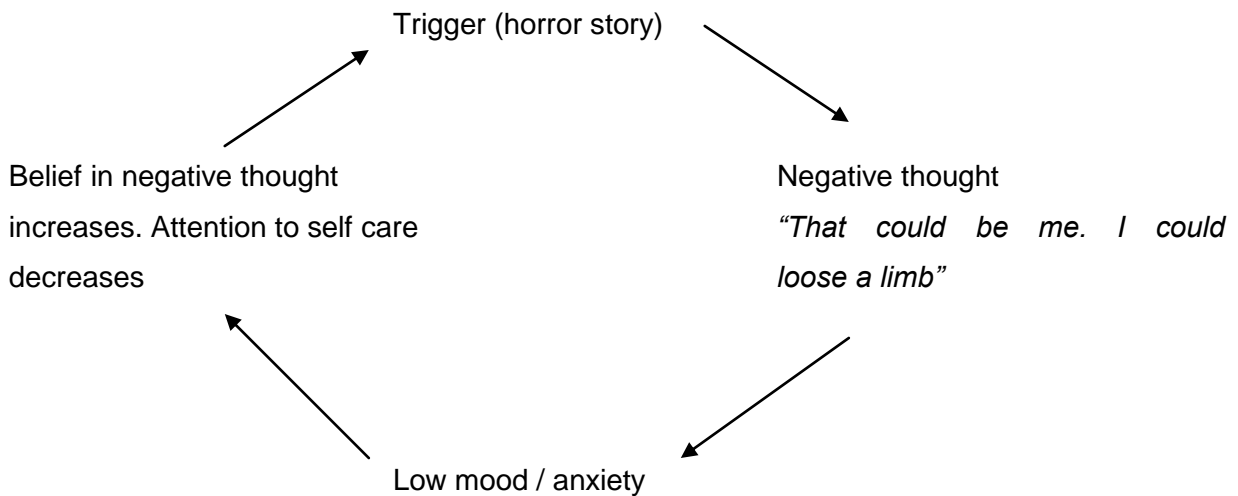
## **How to tackle negative or unhelpful thoughts**

Feelings, thoughts and behaviour are closely interlinked. At times you may find yourself feeling worried, frustrated or helpless about your diabetes. Such feelings are often caused by thoughts running through your mind at the time (e.g. "Nothing I do will make any difference to my diabetes" or "I'll never be able to do this well enough"). These can be referred to as negative thoughts. There is a considerable amount of evidence now that people's beliefs about their treatment influence the degree to which they are able to take responsibility for their diabetes self-management.

Negative thoughts can make you feel anxious, sad, hopeless or tired. They affect everyone from time to time, and are common in any long-term illness. Although they can seem convincing at the time, they are sometimes distortions of reality, which can adversely influence your diabetes control. At times they will be reinforced by well-meaning others, such as relatives and health professionals. For example, some people have reported that in the early stages of their illness they have been regaled with horror stories about what can happen to people with diabetes. Such negative thoughts can trap you in a vicious circle: the more negative thoughts you have, the more you believe them. This can lead to you becoming more and more demoralised. As such thoughts can be hard to shift it is important to focus on tackling them directly and replacing them with more positive thoughts.



*A vicious circle showing how negative thoughts are increased*



*How to spot negative thoughts. What are their characteristics*

Negative thoughts have several characteristics:

1. They are automatic: they tend to pop into your mind of their own accord, without any conscious or deliberate effort. Once one negative thought crops up, it is frequently followed by a whole string of others.
2. They appear logical and plausible: it may not occur to you to question them (although if you do, you will probably find them to be inaccurate).
3. They are distorted: they do not necessarily fit the facts.
4. They are unhelpful: they keep your mood down and make it difficult for you to feel positive and to look after your diabetes effectively.
5. They are involuntary: they can be very difficult to switch off.

These features mean that you may not be fully aware that these thoughts are occurring. Although it may feel as if they are accurate and appropriate, there are often alternative ways of viewing things that will be more helpful and enable you to feel better and achieve more.

### *Identifying Negative Thoughts*

The first step in overcoming negative thoughts is to identify them. Initially, this may be difficult, because of their habitual and automatic nature. However, catching and challenging (or 'answering') negative thoughts is like any other skill - it takes time and regular practise to be able to do so with ease. Don't be discouraged if you have difficulties to start with - the more you practise, the sooner 'answering' thoughts will come naturally to you.

- Negative thoughts
- a) distort the facts
  - b) make demands
  - c) are rigid
  - d) are self-defeating
  - e) jump to conclusions
  - f) over-emphasise the negative
  - g) ignore personal strengths and achievements
  - h) are self critical
  - i) make you feel worse / prevent action
  - j) make change / control seem impossible

You might notice that when you speak, sentences related to negative thoughts start with

- a) I must...
- b) I should...
- c) I ought to...
- d) I can't...
- e) It would be awful / terrible if I...
- f) I always...
- g) I never...
- h) I am a failure
- i) I need / must have...
- j) It's not fair...

- k) I can't stand it
- l) This is terrible

At the start of therapy counting negative thoughts is one way to make yourself more aware of what you are thinking. It can also help to defuse them, by allowing you to stand back and simply observe your thoughts as they occur, instead of being overwhelmed by them. You may wish to tot up negative thoughts on a counter, or by carrying a card and making a tick for each thought that occurs. At the end of the day, see how many thoughts you had - you will probably find that the more you had, the worse you felt during the day. Don't be alarmed if you seem to be having more negative thoughts than ever - you may simply be getting better at catching them. In the long run you will probably find that they become less frequent.

#### *Recording Negative Thoughts*

In the first instance, the most important thing is to focus on "catching" negative thoughts, so that you can become more aware of what you are thinking and its effect on you. Negative thoughts can make you feel bad - anxious, demoralised, guilty, frustrated or hopeless. Notice when your mood or your behaviour changes for the worse, and look back to what was running through your mind immediately beforehand. In doing this you may well find that the same thoughts occur again and again. In addition you may find that your diabetes care has become a bit chaotic.



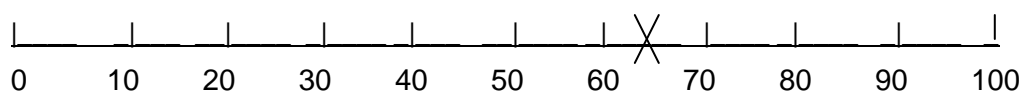
The best way to become aware of negative thoughts write them down as soon as they occur - it can be hard to remember them once the situation has passed. In your 'negative automatic thoughts' diary write down the following:

1. The date.
2. The situation - a brief description of the situation you were in when you started to feel bad. This includes what you were doing, and what you were thinking about before the negative thought occurred.

3. The automatic thought - write out, as precisely as possible, the actual thought which went through your mind. Put it down word for word if you can. If it is an image rather than words, try to write down what you saw in your minds eye.

4. Ask yourself how strong your belief is in each negative thought, on a 0-100% scale. 100% means that you believe it completely, without a shadow of a doubt, and 0% means that you do not believe it at all. You can score anywhere between 0 and 100%.

'No matter what I do I will die from the complications of diabetes'.



It is best to approach the recording of negative thoughts systematically. Try to write down the thoughts immediately as they occur, while everything is fresh in your mind. If it is really impractical to record them as you go along, try to make a mental note of the events which distress you, or times when looking after your diabetes appears difficult, and set aside a "review period" of, say, 20 minutes, at the end of the day or after one of your meals. Use this time to run through a mental "action replay", trying to recall in as much detail as you can what happened, how you felt and what your thoughts were.

There may be times when you cannot identify any thoughts or images as such. If so, ask yourself what the meaning of the situation is. What does it tell you about yourself, your situation, the future? This may give you a clue as to why the situation is making you so upset, demoralised or whatever. For example, an increase in your blood sugar may mean to you that your diabetes is out of control and/or whatever you do the diabetes 'will get you in the end'. Once you can identify the meaning, you will be able to tackle it just as you would any other thought. Below are some examples of negative thoughts.

*A word of warning:* sometimes recording your negative thoughts can make you focus more on them, and so it can be a rather upsetting experience. It may seem as if you are having more negative thoughts than ever, although what is actually happening is that you are just recognising them more readily. It is an important step, since before they can be controlled

they have to be identified. Also, recording negative thoughts in this way can allow you to stand back from them and begin distancing yourself from them.

### **Examples of negative or unhelpful thoughts**

I'll never be able to eat sugar again
The diabetes will get me in the end
No matter what I do I will die from the complications of diabetes
If I accept I have diabetes I will be giving in and then the diabetes will be in control
I feel I'm being punished in some way by having diabetes
I'll be the one to blame if I get diabetes complications
There's no point in discussing my diabetes as people will not understand
If I worry about my diabetes the worry will never stop
I must keep my sugars high or I'm more at risk of having a hypo
I'm completely separated from 'normal' people through my diabetes

## *Alternatives to negative thoughts*

We have discussed unhelpful, automatic thoughts and ways of identifying them. The next step is to evaluate the thoughts you identify and look for more helpful alternatives.

There are 4 main ways of questioning and altering unhelpful thoughts.

### **1. What is the evidence for and against my thoughts?**

When we make negative thoughts we tend either to ignore facts, or select only the evidence that seems to support them. For example if you have a negative thought like "I will never get over this", you may find yourself remembering only the times when you've had setbacks, or things you have tried which haven't worked. Don't just accept this: instead pause, and look at all the facts of the situation. Do all of these facts back up what you think? Are there any facts that contradict it? If any of the evidence contradicts the negative thought then there is probably an alternative way of viewing the situation.

### **2. What "thinking errors" am I making?**

Although negative automatic thoughts often appear plausible, they frequently involve distortions of reality, or "thinking errors". Ask yourself what is going on in your thinking. Here are some common thinking errors:

Jumping to conclusions.

Paying attention only to negative or unpleasant events or feelings.

Thinking in all or nothing terms.

Expecting oneself to be perfect.

Catastrophising.

Predicting the future instead of trying things out.

Assuming there is nothing that can be done to change your current situation.

Worrying about the way things ought to be, instead of dealing with them as they come.

Overestimating the chances of disaster and failure.

Using a double standard - judging yourself more harshly than you would judge others in the same situation.

Condemning oneself as a total person only on the basis of a single event. How often do you do this when you are judging others?

### **3. What is the effect of thinking the way I do?**

Ask yourself how the thought you have identified influences your feelings and actions. Is it helpful? What are the advantages and disadvantages of thinking this way? Does it help you to achieve your goals, or is it standing in your way? Can you find an alternative that will have a more positive effect?

### **4. What alternative views are there?**

There are always different ways of looking at any experience. Ask yourself how else you could interpret what has happened. How would someone else react in the same situation? How would you advise a friend in this situation? Look at the evidence for and against different alternatives and ask yourself which is most likely to be correct. Remember, that you are not trying to find out which is true and which is false, but simply the most helpful alternative view, which will make you feel better and will not restrict your actions.

#### *Answering Negative thoughts*

It is extremely important to challenge negative thoughts systematically in order to overcome them, and writing them down is the most effective way of doing this. By writing down the thoughts, and the alternatives, you can distance yourself from the unhelpful thoughts, and be more objective about them. In the end you will probably be able to challenge and 'answer' them in your head as they occur, but initially, unhelpful thoughts can be too strong or overwhelming and will wipe out the alternatives. In addition, writing down alternatives gives them more power - there they are, in black and white.

You will find it most effective if you record and answer as many thoughts as possible each day. In particular, notice when your mood (or your diabetes self care) take a turn for the worse, and examine what thoughts are going through your mind at the time.



1. Use the daily record sheet to write down any unhelpful thoughts, and rate the strength of your belief, using the scale from 0 to 100%.
2. Question the validity of the negative thought with the methods suggested above. There may be times when a particular question doesn't quite "fit" the thought (for example if the thoughts concern anger at your diabetes, looking at evidence for and against may not be relevant. It may be more useful to look at the advantages and disadvantages of carrying around those particular thoughts.)
3. Write down as many alternatives as you can think of, and give each a rating for belief - once again, 0% means you don't believe the answer at all, and 100% means you believe it completely.
4. Once you have done this you should re-rate the strength of belief in the original negative thought. This will usually have reduced, even if only a little at first (unless you are disqualifying the alternatives e.g. by saying "Its just a rationalisation" - if this happens, just treat this as another negative thought, and challenge it!).

There are a few other points to bear in mind:

**1. It can be difficult to come up with alternatives** when you're feeling badly upset. If this is the case, then it may help if you just write down the negative thoughts, distract yourself and then return when you are feeling calmer, by which time you will be in a better position to look for rational alternatives.

**2. You don't have to find the right alternative**, or an alternative of which you think your therapist would approve. A good answer is one that succeeds in changing the way you feel and allows you more action options. No single alternative will work for everybody: you need to find the ones that work for you.

**3. Beware of unconstructive self-criticism** when you are recording these thoughts. Everyone has unhelpful, negative thoughts at some time or other, and the ease with which we can answer them depends upon the circumstances.

**4. Try not to feel discouraged** if you have the same types of thoughts again and again, or if you find that some thoughts are harder to shift than others: this is quite likely to happen since negative thinking is often well established. The more often a particular thought occurs, the more opportunity you will have to challenge it.

**5. Don't expect your strength of belief in the negative thoughts to disappear in one go:** the negative thoughts have probably been around for some time, whereas the alternatives are often quite new. It will take time and practise to build up belief in the alternatives.

### **In summary, more helpful thoughts:**

- a) take into account all the evidence
- b) are more flexible
- c) are constructive
- d) put the negative aspect of an event in context / include strengths and achievements
- e) emphasise the potential for change
- f) are specific
- g) can positively influence your mood
- h) help you take action

### **Helpful thinking usually starts with:**

- a) I would like to / prefer to...
- b) I may find it difficult to but ...
- c) I would be unfortunate if ...
- d) I am human and will make mistakes sometimes.
- e) I chose to...

## Examples of negative thoughts, challenges and potential courses of action

NEGATIVE THOUGHT	ALTERNATIVE	ACTION
I'll never be able to eat sugar again (all or nothing thinking)	Having diabetes is not about avoiding sugar it is about following a healthy balanced diet and its OK to treat myself occasionally	Plan some treats for myself. This will prevent the likelihood of binges. Discuss with the dietician / nurse how I could adjust my insulin
The diabetes will get me in the end (all or nothing and catastrophic thinking)	We'll all be got by something in the end. However if I look after my diabetes the risk of complications will be reduced	I can monitor my blood sugars twice a day and get into a routine with it rather than avoiding it. Many physicians recommend testing more than twice a day.
No matter what I do I will die from the diabetes (all or nothing and catastrophic thinking, crystal ball gazing)	There is a role I can play in reducing the risk of complications. There is evidence that if you reduce your Hba1c by 1% the risk of complications is reduced.	I can remind myself about this 1% reduction everyday and leave a note for myself on the fridge.
If I accept I have diabetes I will be giving in and then the diabetes will be in control	By acknowledging that I have diabetes I will be able to take some control of it	I can have my blood monitoring kit on hand.
I feel I'm being punished in some way having diabetes	I'm confusing a feeling with a fact. Difficult things happen to good people too.	Remind myself of the disadvantages of thinking this way.

	Are all ill people being punished? Where's the evidence for this? What is this terrible thing that I am supposed to have done?	
I'll be the one to blame if I get diabetes complications	It is true that I am <i>responsible</i> for my diabetes care and <i>to some extent</i> I can influence what happens. There's a difference between blame and responsibility.	I can be more consistent with my healthy eating, testing and injections.
There's no point in discussing my diabetes as they will not understand	A lot of support can be got from sharing problems. Other people don't need to know everything about the diabetes to offer support. I could always explain the diabetes to friends or family. If I talk about it I may be able to accept the illness and then look after it better	I could start by discussing my diabetes with the closest person to me.
If I worry (get upset) about my diabetes the worry (upset) will never stop	Where is the evidence for this? Avoiding thinking about the diabetes doesn't help either. Worry is understandable but needs to be challenged so that I can take appropriate action which will help.	I could write down my specific worries and a list of potential courses of action.
I must keep my sugars high or I'm more at risk of a hypo	Keeping my blood sugars high increases the risk of complications and lowers	I could aim to reduce my blood sugars by 1% in the

	my tolerance to lower blood sugars. This is not a good way of managing hypos and puts me more at risk of swinging.	first instance, then evaluate after 3 months. I could also learn to recognise more quickly the signs of a hypo.
I don't have time to give my injections	How long does it take to clean my teeth in the morning? The injection probably takes about the same time as making a cup of tea – it actually takes approximately 5 seconds.	I could try doing my injection straight away instead of dithering, for 2 weeks, and see how I feel.

### *Personal rules*

Hopefully you will have become more adept at identifying unhelpful thoughts related to your diabetes. During this time you may have discovered that your unhelpful thoughts are not just related to diabetes. You may also have started to notice other people's unhelpful thoughts. You may have discovered that you are quite hard on yourself, perhaps a reflection of low self esteem, or that you like to do things perfectly in all domains of your life, not just your diabetes.

Negative thoughts are usually a reflection of some specific rule, belief or attitude about yourself. At times you may apply this rule to other people. Below are some examples of such thoughts;

1. I should be able to endure things without complaining (i.e. not discussing diabetes with friends who may be supportive)
2. I should be able to find quick solutions to any problems (i.e. going for a quick fix rather than taking the long-term view)

3. If some-one disagrees with me, they think I'm stupid or difficult (e.g. Dr having different viewpoint about diabetes treatment, resulting in me avoiding clinic appointments)
4. If I make a mistake it means I'm incompetent (My blood sugar is above 8; there's no point in trying)

Personal rules develop in early childhood and are a reflection of genetics and parental and environmental (e.g. school) influences. Remember, we all have personal rules. Sometimes they work for us and sometimes they work against us. The important thing is being able to recognise when they interfere with our quality of life, in terms of our emotions and our ability to cope.

Personal rules can be tackled in the same way as you've already been doing. They may however, prove to be more resistant to change initially. In addition, you may find that they are associated with more upset. However, do persevere, as even these very entrenched beliefs, are possible to change. Think of them as being prejudices that will shift as you gather more evidence against them.

In order to make this clearer, we have illustrated the process below in the diagram. In summary, early childhood experiences influence the formation of personal rules, which then affect how we view different aspects of our life, ourselves, others and the world. You may not realise what your personal rules are until something happens, i.e. an important life event, stress, illness, which requires you to adapt or cope differently.

*How personal rules develop*

**Early life experiences**

e.g. critical parent

/  
/  
/

**Form rules / beliefs**

e.g. I must do things perfectly to avoid criticism

/ (influences behaviour)

Avoidance of reporting to nurses high blood sugars for fear of being negatively judged and punished in some way

/  
/  
/

**Critical Incidents**

e.g. severe hypo resulting in being taken to hospital resulting in self doubt

/  
/  
/

**Assumptions Activated**

“If I don’t do it right I will be a failure” or “If I do it right I will avoid criticism”

/  
/  
/

<b>Symptoms</b>	<b>Behaviour</b>	<b>Mood</b>	<b>Thoughts</b>
Hypo	Running blood sugars high by eating lots of chocolate to avoid criticism	Anxiety about what the nurse may think	Catastrophising about Dr’s reaction e.g. ‘Dr Blogg’s will think I am a failure for having this hypo’

## How anxiety affects your diabetes

Realistically you are bound to feel anxious about some aspect of your diabetes from time to time. Anxiety can work for us by springing us into action. However, it can also work against us, particularly if it's out of proportion or long lasting.

### *Physical Signs of Anxiety*

When in an anxious state the whole body is aroused or excited. When the body is excited physical changes take place, most of these being triggered by an increased flow of adrenalin (a hormone) into the bloodstream. People describe many different feelings when they are anxious but some are more unpleasant than others. These feelings will vary from person to person. They are often misinterpreted as something serious such as having a heart attack. The immediate symptoms of anxiety may include palpitations, headache, fatigue, shakiness, blurred vision, dry mouth, tightness in the throat, nausea, butterflies in the tummy, sweaty, tightness in the chest, tingling or numbness in fingers, loose bowels, desire to go the toilet.

The long-term effects of stress and anxiety include:

- *Mood disturbance* - irritability, being quick tempered, feeling easily upset, flying off the handle very easily;
- *Sleeping difficulties* – difficulty getting off to sleep, any change in sleep pattern, bad dreams, recurring dreams;
- *Fatigue* - exhaustion, feeling easily tired;
- *Feeling overwhelmed by too many things* - 'can't be bothered doing anything';
- *Unreal feelings* - "everything around me seems strange and unreal", "I feel different - like in a dream", fuzzy headed";
- *Sensitivity to noise* - noise you used to tolerate is now very irritating;
- *Absent mindedness* - inability to concentrate, forgetful;
- *Clumsiness* - poor co-ordination;
- *Indecisiveness* - "can't make up my mind about even small matters";
- *Restlessness* - agitation, fidgety, inability to sit still;
- *General loss of self-confidence*
- *Tendency to go over things again and again*



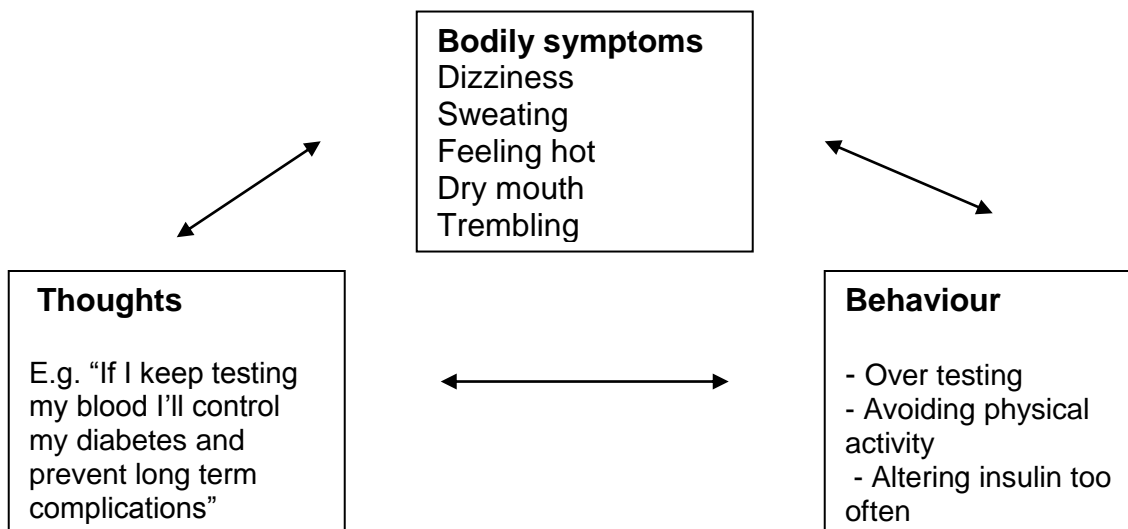
## Anxiety and how it affects us

We all feel anxious at certain times. This is perfectly normal. When we are anxious, we feel wound up, nervous, worried and tense. These feelings can range from feeling a little uneasy to a continuing sense of dread. Sometimes it can be so bad that the person feels panicky and frightened. However, if you are constantly feeling anxious about your diabetes you may decide you need to do something about it. It is possible to have some control over your anxiety, as opposed to feeling out of control.

Anxiety affects us in three main ways. It affects:

- a) our bodies
- b) our behaviour and
- c) our thoughts

This is illustrated in the diagram below:



Once you have become anxious about a certain aspect of your diabetes, the anxiety tends to remain. This is because it has become a habit. You may have got into the habit of worrying and expecting difficulties and your body also gets into the habit of being tense and anxious. The things that you do in order to control or get rid of the anxiety quickly become a habit. Breaking habits is difficult for everyone.

Sometimes anxiety can reach such a pitch that you have a panic attack. This is a frightening experience. The physical symptoms escalate to the extent that you feel that something terrible is going to happen such as collapse, die, or go crazy or somehow lose control of yourself completely. Panic, like fear, is a combination of physical symptoms and frightening thoughts.

The important thing to know about anxiety and panic is that they are not actually dangerous. However, it can be helpful to understand how anxiety will affect your life and your diabetes. For example, it is difficult at times to distinguish between symptoms of anxiety and symptoms related to your diabetes e.g. when you are having a hypoglycaemic attack. An advantage of making this distinction is that it helps you manage the problem appropriately. We have tried to help you make this distinction by drawing up a table of symptoms related to anxiety and symptoms related to diabetes (see below). In practice, not all of the symptoms will apply to you.

#### Similarities and differences between symptoms of hypoglycaemia and anxiety

	Hypoglycaemia	Anxiety/panic
a) Symptoms	Dizziness Sweating Trembling Nausea Palpitations  <b>More specific to diabetes</b> Blurred vision Tingling around the mouth Confusion Irritability, bad temper Unsteadiness Unusual lack of co-operation Hunger Vomiting Loss of consciousness	Dizziness Sweating Trembling Nausea Palpitations Dry mouth       Fear rather than actual fainting

### *How anxiety can develop into a problem*

Anxiety may lead you to either avoid testing your blood sugar or you may be extremely rigid about testing and expect perfect results. You may avoid exercising for fear of lowering your blood sugars or you may overeat prior to going to bed for fear of becoming hypoglycaemic during the night. Listed below is a table of difficulties and potential ways of dealing with them (see table below). It is natural to feel some anxiety about your diabetes, but if the anxiety becomes out of proportion it may lead you to either over-react or ignore the situation.

### *Affects of stress on diabetes*

The relationship between stress and diabetes is complicated. Stress affects diabetes and having diabetes affects how we respond to stress. Stress can *directly* affect blood sugars through the release of stress hormones or *indirectly* through self care behaviours i.e. when stressed you may comfort eat or you may just feel overwhelmed by everything and neglect your health. Having said that, it cannot be assumed that all forms of stress will increase blood glucose in all patients or that all patients' reactions will be the same. Research studies have shown that patients may be especially vulnerable to the effects of stress when they are recovering from hypoglycaemic or hyperglycaemic attacks. Despite this two-way relationship there are some factors which help reduce the effect of stress, more specifically social support and persisting with self care when stress occurs.

### Anxiety related difficulties

Problem	Strategy
<p>Avoidance of testing for fear that my blood sugar will be high.</p> <p>This leads to short term reduction in anxiety v long term worry and uncertainty.</p>	<p>Revisit the benefits of Blood Glucose Monitoring. It can be a compass to your self care. Challenge negative or unhelpful thoughts e.g. 'if it's high I can then do something about it.'</p> <p>Make list of pro's and con's of avoiding testing.</p>
<p>Over testing for fear of my blood sugar dropping.</p>	<p>Look at pros/cons of over testing. Gradually lengthen the time between checking.</p>
<p>Avoidance of needles for fear of fainting.</p>	<p>Gradually exposing yourself to handling needles and explore various options regarding injections e.g. size of needle or frequency of injection.</p>
<p>Avoidance of going out to dinner due to uncertainty about carbohydrate content.</p>	<p>Increase knowledge &amp; confidence with diet and insulin adjustment. Challenge unhelpful thoughts.</p>
<p>Give Dr false blood sugar results for fear of being blamed and being thought badly of .</p>	<p>Assertiveness skills to help improve communication with others. Challenge unhelpful thoughts.</p>

<b>Problem</b>	<b>Strategy</b>
Overeat in response to low blood sugar in order to feel better quickly.	Eat something sweet and wait 10 mins; follow up with a few dextrose tablets (not a Mars bar). Use distraction to avoid overeating. Challenge unhelpful thoughts.
Avoidance of strenuous exercise for fear of sugars dropping quickly.	Gradually increase your time exercising over a period of a few weeks as you monitor your blood glucose. Test blood sugar before strenuous exercise and take extra carbohydrate (not a Mars bar). Ask Diabetic specialist about this.
Repeated calls to GP or clinic to ask for help or advice.	Identify what you do know and identify what your fears are. What stops you implementing potential solutions? Plan what to do in crisis; Write a 'blue print' (plan) for setbacks.
Spending time worrying about long term complications.	Challenge worrying thoughts and problem solve difficulties that you can do something about. Access support. Find out the up to date facts about risk of complications. Avoid listening to out of date horror stories.

## Healthy eating in diabetes

We would now like to address healthy and unhealthy eating habits in diabetes. You may find this helpful in making the link between the complex relationship between eating and diabetes control. We realise that having to be aware of your eating and its impact must be frustrating, difficult, tiring and, at times, unsociable.

### *What is healthy eating?*

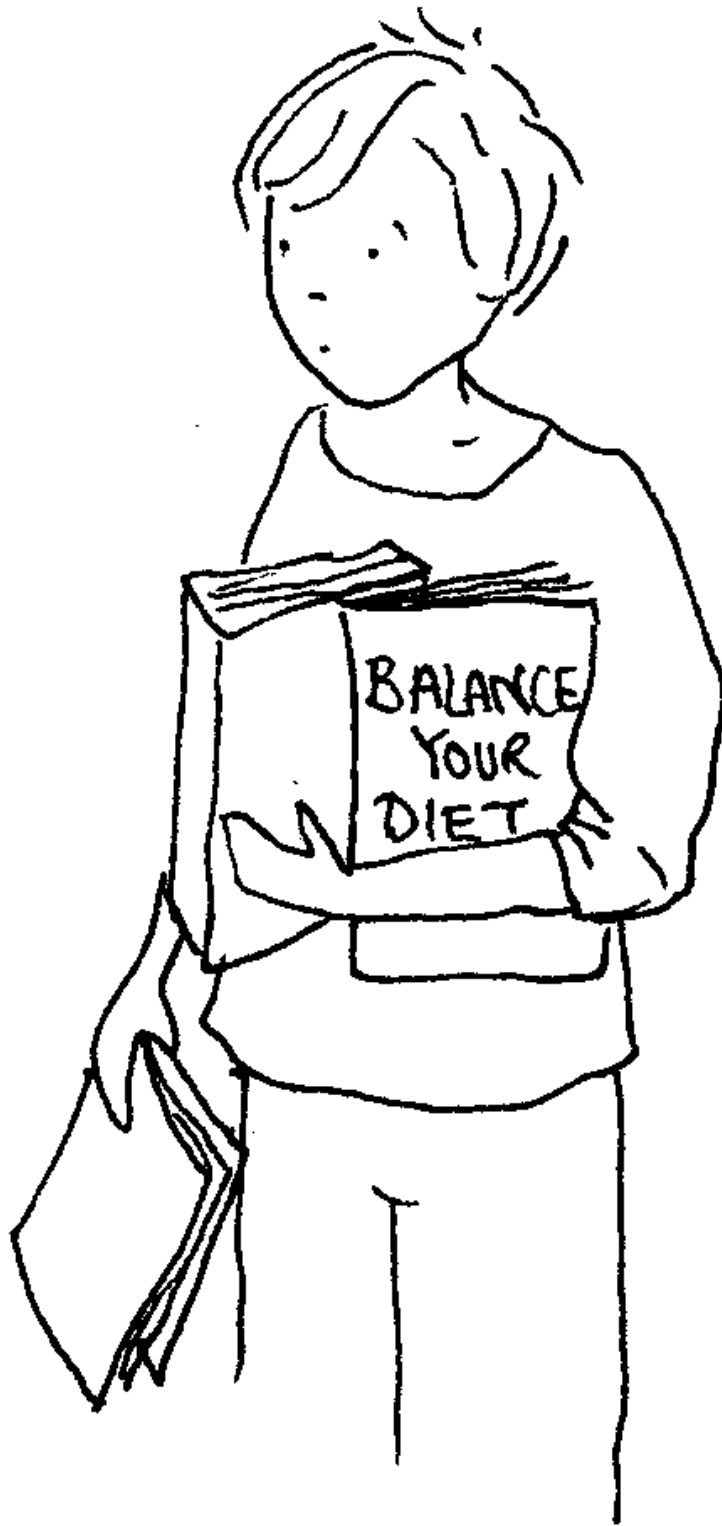
Healthy eating habits involve eating the right amounts and varieties of food to maintain a healthy metabolism. This is difficult in our society where unhealthy eating is the norm. Eating habits vary from culture to culture and from generation to generation. For example, in western societies people aspire to eat meals three times a day, but in reality this will vary dramatically according to lifestyle, preferences and culture.

People without diabetes struggle to eat healthily and some give up on the idea almost altogether. People with diabetes will find this equally challenging, if not more so. No one can be perfect and it is accepted that there will be times when it just seems impossible to eat healthily. This doesn't generally matter so long as you can return to healthy eating as quickly as possible.

When you think about it, there aren't really any differences in the ideal diet of a person with Type 1 diabetes and a person who doesn't have diabetes. They are exactly the same. The only difference is that a person with diabetes needs to know that the amount of carbohydrates they are eating matches the amount of insulin they take. They also need to know how exercise affects the amount of insulin required. This is because your body is not making insulin which is needed to store and release glucose which gives you energy.

### *What is unhealthy eating?*

It is important to remember that it is almost impossible for anyone to stick to a healthy diet constantly. Eating only becomes unhealthy and distressing when the normal variations in eating habits get out of control to the extent that you are damaging your health and you feel miserable, distressed or worried.



There are different types of unhealthy eating. We have listed the main ones below:

1. *Binge eating*: this is eating a really large amount of food in a short-time. It can be any food but it is usually food that is readily available for eating such biscuits, cakes, crisps, sweets, chocolates, cereals and sandwiches. People feel out of control during their binge. Binge eating is often accompanied by feelings of distress before, during or after the binge.

The triggers that start binge eating may vary. For instance, for some people bingeing begins during or after a hypoglycaemic episode. Normally you would take some rapid acting sugary food such as dextrose tablets or orange juice, but sometimes people are driven to overcompensate by eating large amounts of sweet things, one chocolate bar is followed by another. Subsequently, the fear of having another hypoglycaemic episode becomes so strong that some people impulsively eat large amounts of sweet foods at the slightest bodily sensation or belief that another hypo may occur. Some people become so convinced that they are about to have a hypo that they don't think it is necessary to check their blood sugar any more. Also, you may remember that being excessively worried or anxious can mimic the symptoms of low blood sugar.

2. *Grazing*: this is the habit of constant picking of food often without even realising you are doing it. If you are surrounded by food all day (being at home, having a shop within walking distance of your office) factors such as boredom, stress, or being so busy that you never have time for a proper meal can lead to eating snacks or mini-meals all day. As a result you never feel like you have a full belly so that a cycle of snacking and a belief that you are still hungry are maintained.

3. *Comfort eating*: Some people find themselves eating to make themselves feel better. This often occurs when you feel you are not coping or when a situation is particularly stressful. The problem is that any comfort from this type of over eating is very short lived so you end up eating more and more in the hope that the distressing feelings will go away. However, more often than not they are replaced by guilt, disgust and shame at the large amount of food that has been eaten.



4. *Habitual over-eating.* This is a general tendency to take larger proportions than you need. Sometimes this habit started way back in childhood when your parents might have insisted on you finishing all the food on your plate and discouraging wasting good food. Alternatively, you may have been brought up with little food and therefore have learned to finish everything that is on your plate and perhaps to help yourself to generous portions. You may simply be unaware that your body could be satisfied and work perfectly on a smaller amount of food.

5. *Dieting.* There are many diets on the market that promise to reduce weight without any detriment to your health. Some of these diets can be potentially bad for you and it is really important to know which ones are safe to use in diabetes. Some people get into a habit of repeated cycles of dieting and weight loss. Really intensive dieting may lead to weight loss initially which is often followed by over-eating which leads to re-gaining the weight just lost, and so the cycle begins again.

Our attitudes towards eating and our diabetes is linked to what we actually eat. If we have generally positive attitudes and beliefs about what we should eat we are more likely to have a healthier diet. Unhelpful thoughts such as excessive worrying, not liking your body size and weight or lack of knowledge about insulin may then result in unhealthy eating. Below we describe in more detail patterns of thinking and behaving that are common in people with diabetes and in unhealthy eating.

#### *Insulin makes me hungry*

Some patients have been told and believe that insulin makes them hungry. Insulin does make you hungry but only when you are having too much of it. When your body is adjusting to a new insulin regime or when you have been ill, you may feel more hungry. Undoubtedly, any change in insulin may result in an initial change in appetite. Conversely, changes in carbohydrate intake will alter insulin requirement. However, excessive hunger should reduce once a balance between carbohydrate intake and insulin is achieved.

#### *Fear of fatness*

Most people have a view about what their body size and weight *should* be. Most people will also have a realistic view about what their body size and weight *actually is*. Sometimes

though, an intense fear of fatness leads to a preoccupation with body size and weight. Their worries are out of proportion to their actual body size, and these worries continue despite reassurance from others, that their weight and body size is fine. In response to this fear, in extreme cases, some people go to great lengths to lose weight. Methods used include severe dieting, excessive exercise, taking appetite suppressants, vomiting and omitting insulin. In diabetes, these methods rarely lead to substantial weight loss because the person usually becomes medically ill first.

### *Low self-esteem*

Sometimes a low opinion of your self-worth can lead to over-eating because you don't like yourself and don't believe you are liked by others. Your self-worth goes. This may have been triggered by unpleasant events early in childhood or teenage years. Perhaps one of your family members or friends at school were critical of your eating or your body size. Inevitably this would have some effect on your approach to eating, your body image and your self-esteem (see section on tackling negative automatic thoughts).

### *A vicious circle of unhelpful thoughts and unhealthy eating*

Sometimes the very thing one does in order to help a situation, inadvertently keeps the problem going. Either over-eating or under-eating as a coping strategy will perpetuate unhelpful thoughts, be they related to eating, diabetes or self-esteem. A vicious circle develops which is then difficult to break out of. As we have already stated before, bad habits are hard to break. Some famous person once said "do not make a habit of something you do not wish to keep". The longer this vicious circle persists the more likely it is that the consequences to your physical and mental health will be harmful.

## Practical solutions

### *Keeping a diary*

Keeping a food diary for a short period of time will give you a more accurate picture of your eating habits. Not only will you get a clearer picture of what you are eating but it will also give you a more focused awareness of your problem, which can be your first step in changing it.

You may notice certain patterns emerging. This will give you some idea about what changes you may want to make. It is important to be realistic in terms of time-scale and degree of change possible.

### Food Diary

	<b>What did I eat?</b> (include all snacks, and meals)	<b>Time I ate;</b> <b>where I ate</b>	<b>Why did I eat it?</b> (hunger, boredom, upset, sadness, stressed, hypo)
<b>Day 1</b>			
<b>Day 2</b>			
<b>Day 3</b>			
<b>Day 4</b>			
<b>Day 5</b>			
<b>Day 6</b>			
<b>Day 7</b>			

Below is a list of practical strategies to guide you. You do not have to stick to these. In fact you may have other ideas that might have worked in the past or partially work now. Your own solutions are sometimes the best because you know yourself better than anyone else and will have a good idea of what will work for you.

**Practical strategies for you to practice**

Goal	Description of strategy
To cut down the number of times you check your blood sugar (BM), if you check more than you have been advised by the diabetes clinic.	Set yourself a target of how much you want to cut down. Develop distraction strategies to overcome the temptation to check your BM. Ask yourself what is the evidence for and against a high or low BM at that particular moment.
To reduce bingeing	Shop from a list to avoid buying food that is bad for you. Don't go shopping when you are hungry. Encourage yourself to have more contact with other people if you are in the house all day. Take up a sport, hobby or small job. Identify non-food treats as a reward when you've achieved your goal, every week.

<p>To give yourself insulin, when you feel like avoiding it, in order to lose weight.</p>	<p>List the benefits and disadvantages of this approach. Tell yourself that this method is not an effective method for reducing weight and that all it does is hurt your body. Are there any healthier alternative ways of losing weight? Should you see the dietician?</p>
<p>To start or increase exercise.</p>	<p>Remind yourself that famous sports people do have diabetes e.g. Stephen Redgrave. Remember that the effect of exercise on blood sugar may be delayed, so experiment with insulin dose. Seek advice.</p>
<p>To improve awareness of impending hypos.</p>	<p>Increase awareness of hypos so predictions become more accurate. At first sign of hypo check blood sugar, before eating, unless you feel particularly unwell. Drink a glass of orange juice or eat a few dextrose sweets and wait for 10 minutes.</p>

## Problem Solving

Problem solving is based on the common observation that emotional symptoms are induced by problems of living. If problem solving is to succeed then you need to understand the relationship between symptoms and problems. If the problems are tackled then symptoms can be expected to resolve. Problems should be tackled in a planned and structured way.

Although some problems may not be completely solved, in starting to tackle problems you can re-assert control over your life. It is probably this regaining of control that lifts mood. Problem solving focuses on the here and now rather than on mistakes of the past.

Problem solving can be divided into 5 stages. Like with any new skill it takes a while to be able to do this automatically, so in the first instance you may find it helpful to write down the various stages. Until you've mastered the art of problem solving it can be useful to go into detail at each stage. However, once you have practiced it several times and have become more confident you will be able to skip some of the steps. It is always helpful to evaluate how effective your strategy has been and this will guide you with future difficulties. Sometimes a particular stage or aspect of problem solving is difficult. This is usual and just means that you need to practice that skill more often and perhaps elicit more help.

Stage 1:

- a) Identify your problem(s)
- b) Recognise your emotional symptoms i.e. anxiety, low mood, worry associated with the problem

Stage 2:

- a) Break down the problem(s) into smaller chunks

Stage 3:

- a) Consider your strengths and assets
- b) Consider support available from relatives, friends and health professionals

Stage 4:

- a) Consider alternative solutions to each problem
- b) Try not to discount possible options too soon
- c) Examine the pros and cons for each solution
- d) Choose a preferred solution
- e) Identify steps to be taken to achieve the solution (long term goal)
- f) Specify exactly what you are going to do and when (put it in your diary)

Stage 5:

- a) Implement your steps
- b) Evaluate your degree of success
- c) Don't be put off if your first solution doesn't work
- d) Consider common reasons for failure i.e. being too ambitious, lack of consistency or practice, giving up too soon
- e) Reward yourself for your success
- f) Try not to focus on failures rather focus on what you've achieved

We will now focus on one specific problems to illustrate the approach. You can follow the same principles in relation to a problem you have encountered in the past. In the future you will then find this process more helpful.

*Diabetes specific problems:*

*Experiencing another illness such as an infection*

Stage 1:

- a) Identify the problem: Blood sugar is going up, for no obvious reason; it may be due to an infection, cold or another minor ailment.
- b) Identify your emotion: worry/anxiety/stress related to the physical effects of the high blood sugars and the illness.
- c) Recognise the link between the anxiety/worry and the problem. Be aware of your own emotional response to this situation. This will help you solve the problem.

Stage 2:

a) Break down the problem into smaller chunks i.e. managing the illness symptomatically; managing the high blood sugar; managing the stress of the situation

Stage 3:

- a) Consider your own strengths and assets i.e. how you would consider helping others in a similar situation; now apply same rules to yourself.
- b) Consider support available from friends, relatives, health professionals. Do you need practical or emotional support. Who would provide the type of support you need?

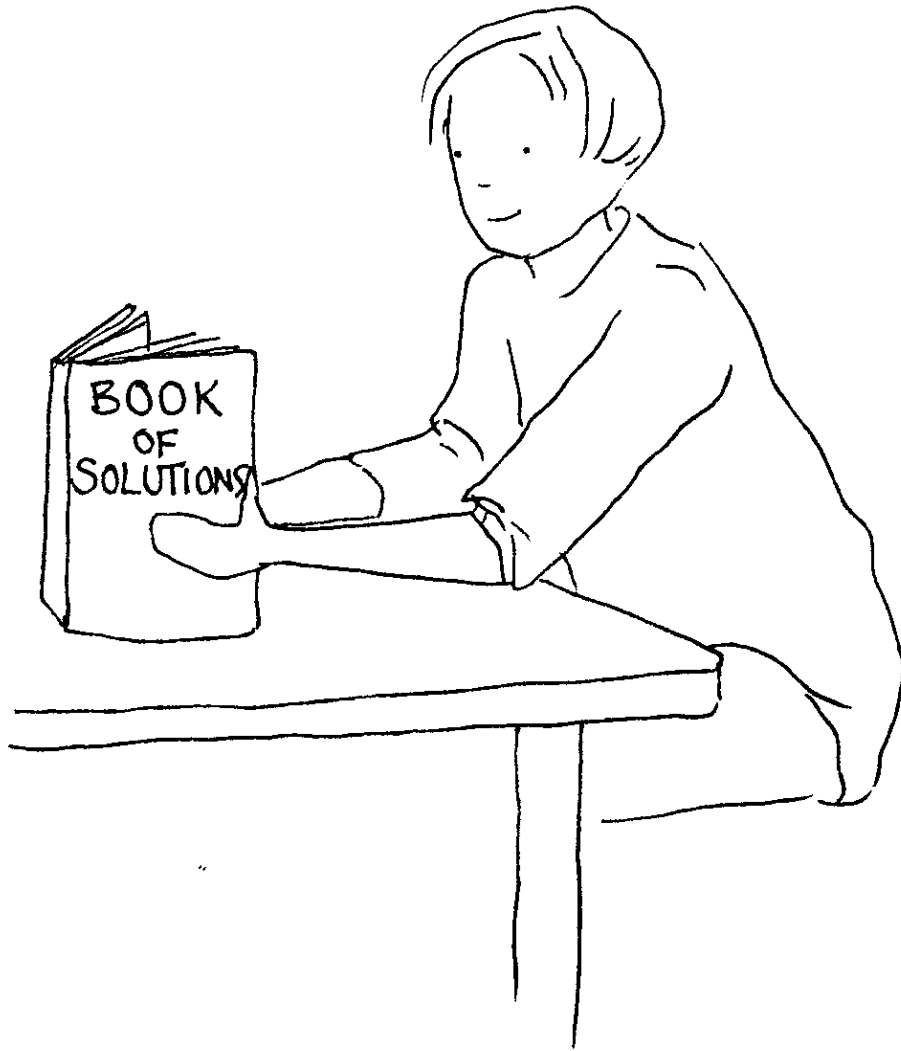
Stage 4 & 5:

a) Consider alternative solutions remembering that each individual and their diabetes is different. The following strategies may be employed when you have an infection:

- Take fluids containing sugar as sugar will still be absorbed.
- Test blood sugars to assess whether blood sugar is rising.
- Test urine for ketones.
- Adjust insulin according to blood sugar result.
- If vomiting occurs and continues it is always sensible to seek medical help, especially if your urine contains ketones.
- Contact your diabetic clinic.

b) You may also want to consider what sort of support you need i.e. practical or emotional support. You may consider asking a friend for help or you may think about talking to a fellow diabetic who has experienced something similar. These courses of action then help you to put the situation in perspective, normalise your experience and help you deal with the situation realistically. Don't be put off, if occasionally things don't work out as you had intended, go back to the drawing board and think again.





## Becoming more assertive

“To be assertive means to state or affirm positively, assuredly, plainly or strongly”.

### *What is self-assertion?*

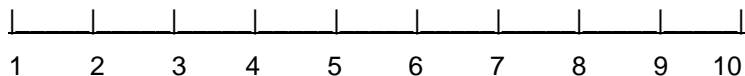
The core of self-assertion is an awareness of, and respect for one's own feelings. It is being able to express one's needs, wants, feelings and beliefs in a direct, honest and appropriate way. It is being able to stand up for one's own rights without violating another person's rights. Assertiveness can be divided into 4 areas:

1. Expression of positive feelings.
2. Expression of negative feelings.
3. Limit setting.
4. Self-initiation.

The first step towards becoming more assertive is to increase your awareness of the situations where you find it hard or easy to express your feelings and opinions. Below you will find examples of the 4 areas of assertion as listed above. Please rate yourself by marking on the line where you feel best describes how good you are in this particular situation.

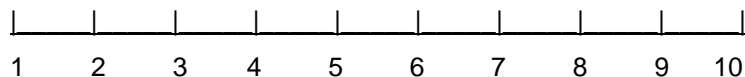
No. 1. (left-hand side of the scale) = never able to achieve this.

No. 10. (right-hand side of the scale) = always able to achieve this.

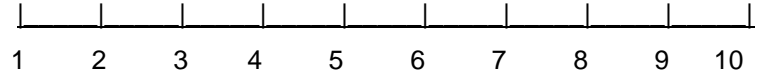


Expression of positive feelings: this involves sharing with other people feelings of warmth, appreciation and affection.

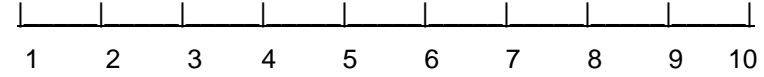
1. Letting someone know that you care about him/her



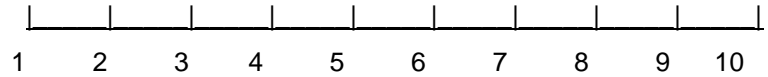
2. Letting someone know that you are grateful for something they have done for you.



3. Telling someone that you like something about them or their actions.

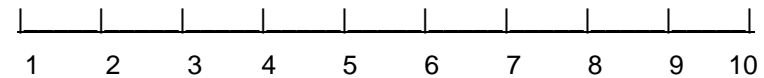


4. Letting a person know that you are pleased with their praise and that you appreciated it.

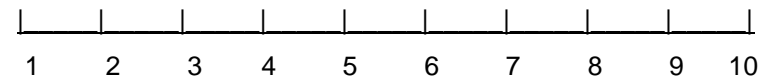


Expression of Negative Feelings: This involves sharing with other people feelings of discomfort, annoyance, hurt and fury.

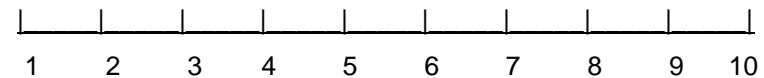
1. Letting someone know that they are responsible for creating a particular problem for you.



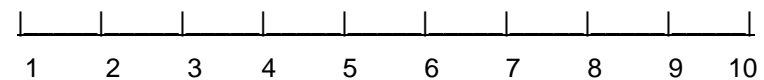
2. Letting someone know that you are angry with them in a direct, honest manner.



3. Letting someone know that you dislike what they are doing, and wish them to stop.

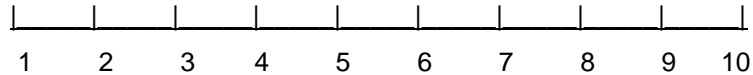


4. Being able to say you are disappointed because of a change in plans.

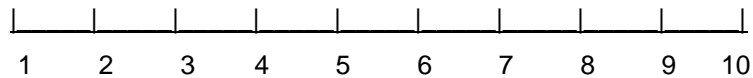


Limit setting: Is setting your own boundaries independent of the external demands of other people e.g. how you spend your time, how much privacy, emotional and physical space you need.

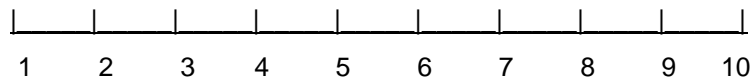
1. Being able to say you do not wish to answer a particular question which you consider too personal.



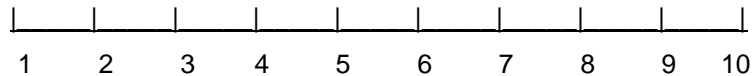
2. Being able to refuse a persistent friend's invitation out when you wish to spend an evening by yourself.



3. Being able to refuse to accept something as your responsibility when it is not.

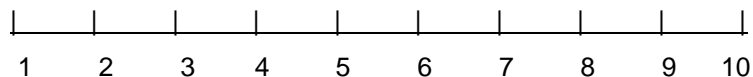


4. Being able to ask someone to stop smoking as it offends you.

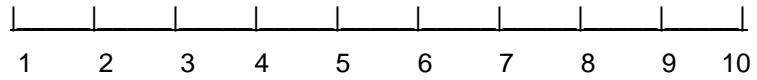


Self-initiation: Through self-initiation we say 'yes', expressing what we wish to do, initiating those actions and expressions that fit us as a person.

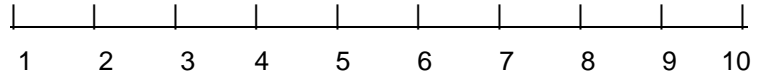
1. Asking someone for help in handling a difficult situation that you do not feel able to manage yourself.



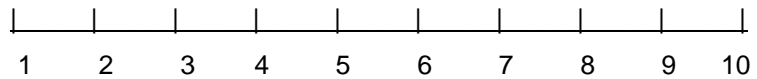
2. Asking for what you need and want from another person.



3. Being able to express your own opinions even when they do not agree with others.



4. Inviting a friend out for an evening.



Now please list 3 situations related to your diabetes that you would like to be able to deal with more assertively in the future.

Situation 1:

Situation 2:

Situation 3:

### *Why be more assertive?*

Given that becoming more assertive can generate anxiety, why bother? Well, although difficult, there are lots of advantages for your health and well-being. There is an increased chance that your diabetic needs will be met by health professionals. You will feel more confident in managing and being responsible for your diabetes. You will feel more confident in asking for help from others. Finally, you will save energy and your quality of life will improve.

### *How to be more assertive*

This is easier said than done. Many people believe that being *assertive* is akin to being *aggressive*. This is not the case. Aggression is an act against others; assertion is appropriate standing up for yourself. People who are assertive generally are able to communicate with a variety of people regardless of class and degree of perceived power with strangers, friends or family. This communication is open, direct and honest. They are able to say how they feel, what their views are and can articulate what they want. In contrast to the *passive* person who waits for things to happen, the assertive person attempts to make things happen. Of course this is not always easy, but an assertive person tends to have a more compromising style and accepts that at times s/he will get more of what s/he wants while others less.

There are many reasons as to why people have difficulty being assertiveness. It may be related to a fear of appearing selfish or pushy, a fear of being disliked or rejected or it may be borne out of a fear of negative consequences. Alternatively, it may be related to feeling particularly stressed, which could influence your level of confidence and therefore degree of assertiveness. Sometimes we don't know what to say or we don't know how to say it, or we may be unsure we're right. It may be that we are conforming to a role e.g. employee to boss and are unaware that we could be more assertive. Occasionally we set rigid requirements for being assertive such as feeling the need to have all the facts or a fear that the other person may not be able to take it. Whatever the reason any individual, including an individual who has diabetes, has the right to the following:

1. The right to be treated with respect.
2. The right to have and express feelings and opinions.
3. The right to be listened to and taken seriously.

4. The right to set personal goals.
5. The right to say no without feeling guilty.
6. The right to ask for things.
7. The right to ask for information from professionals.
8. The right to make mistakes.

Lets now look at an example in which it may be difficult to assert yourself for all sorts of reasons, not least because you may feel yourself to be in a less powerful or vulnerable situation. As a child this may happen with parents and teachers. As an adult, communicating with doctors may lead you to feel unable to assert yourself.



Situation in which you may find yourself:

*Developing a diabetic complication*

During a check up you are told that you have developed an early sign of diabetic eye disease which could result in more serious visual problems. You are experiencing blurred vision. You may be concerned about the longer term consequences such as blindness. Initially it is understandable that you feel anxious, worried or depressed and this is a normal reaction even though the news may have been delivered in a matter of fact sort of way.

Listed below are a number of potential responses you may receive from your doctor, coupled with assertive replies that you may be able to draw on and use with practice.

Doctor

Potential assertive replies

I can't discuss your new regime now,

How long have we got for this appointment?

As this is really worrying me, I'd like to spend 10 minutes talking about this now.

Can we make an appointment, convenient to us both, when we can discuss this in more detail.

OK, lets talk about this for 10 minutes now and we can review the situation in 3 months time.

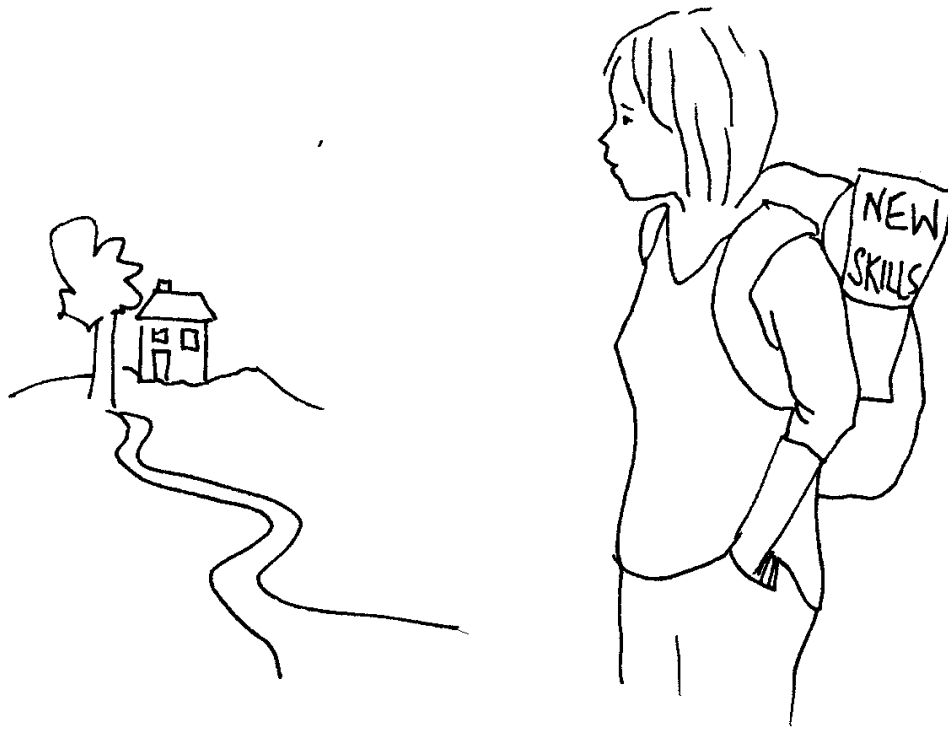
Thank you, but I am very concerned about this and would like to see you for longer, in another 2 weeks.

Today, it would be helpful if you could tell me about what will affect the progression of the retinopathy and whether it is reversible.

Well, the retinopathy is somewhat reversible and the condition will not necessarily get worse if you take helpful action.

OK. What can I do differently and how can you help me.





## Conclusions

You will probably now have spent time reading this information and may have practiced some of the strategies with varying degrees of success. The key to long lasting change is practice. This cannot be emphasised enough. From time to time you are bound to struggle. The important thing is to get back on track as quickly as possible and once again become consistent in your approach to daily life and your diabetes self care. This is the case for any lifestyle change you may be trying to implement. Acceptance of responsibility for your own health and commitment to the process of change is key to the outcome i.e. better diabetes control and improved HbA1c's (blood sugar results).

Change is only possible if you accept that from time to time problems with your regime will occur, resulting in you veering off course for a while. Expect this to happen, expect to be

disappointed from time to time, and lasting changes are more likely to happen. Think of it as a marriage. There will be “highs and lows”, but it’s the overall picture that counts. It is important not to over-react to every minor hiccup. Things would soon become over-complicated and over-whelming. A key to success is to steer a steady course, getting back on track when you need to.

Once you have committed yourself to a particular way of coping you need to reward yourself frequently in order to avoid the regime feeling like a burden and to appreciate your achievement.

Finally, in order to consolidate all that you have learned, you may find the following section helpful. Please complete this for yourself and keep a copy in a prominent place so that you can access it easily in times of difficulty.

We would like to take this opportunity to wish you luck in your future endeavours. Remember that things are constantly changing and you need to be persistent but flexible in your approach.

## Evaluation

The most valuable ideas and techniques I have learnt in therapy are:

The events and situations that might trigger a relapse are:

The signs that my diabetes is starting to be unstable are:

If I notice my diabetes starting to be unstable I will help myself by:

In order to maintain my gains I will do the following regularly:

## Reading list

Diabetes Burnout. What to do when you can't take it anymore. (1999) William Polonsky. American Diabetes Association. ISBN: 1-580-40033-7

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Living with Diabetes for those treated with Insulin. (1998) Dr John L. Day. John Wiley & Sons Ltd. England. ISBN: 0-470-84526-0

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A woman in her own right. Ann Dickenson

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Feeling good the new mood therapy. (1980) David Burns. A Plume book.

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The Diabetic Athlete: Prescriptions for exercise and sport. Sheri Colberg. Human Kinetics.

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<b>Date</b>	<b>Situation</b> What were you doing/thinking?	<b>Unhelpful Thoughts</b> Rate belief (0 - 100%)	<b>Alternati</b> Rate bel (0-100%

