Living well with Pre-diabetes
What is Pre-diabetes?

Pre-diabetes is where the amount of glucose in the blood (blood sugar) is higher than normal, but it is not high enough for you to have diabetes. People with Pre-diabetes have an increased risk of diabetes and heart disease. To help you control your blood glucose level it is important to:

1. Take regular exercise

2. Be a healthy weight

3. Eat a healthy diet
1 Take regular exercise

A small amount of regular exercise, whatever you most enjoy doing, will help reduce your blood glucose and has many other health benefits too. You need to do at least 30 minutes of activity on most days of the week (at least five days). Try walking, swimming, aqua-aerobics, cycling, dancing, joining a fitness class, household chores such as hoovering, gardening, cleaning or why not try the sit-to-stand exercises as shown on pages 5, 6 and 7.

If you’re trying to lose weight, you need to do at least 60 minutes a day.

Healthy muscles are very important, as most of the glucose in your blood is used by muscles. You should try to use arm or leg weights at home or in the gym or join a Pilates class.

If you have a heart condition or have not exercised in the past, you should consult with your GP before commencing an exercise programme.
Sit-to-stand exercises

The following pages show a series of sit-to-stand exercises. You should aim to spend one minute on the exercises shown in each picture. Work at a pace that is comfortable for you. Enjoy it!

Up on your toes
Kick straight back
Marching on the spot
Stand up / sit down
Leg out to the side  
Knees up  
Step forward  
Mini-squat  
Arm straight up  
Up and out
Take regular exercise

Wall press up

Bend and straighten

Straighten at elbow

Boxing

Reach up

Shrug shoulders
2 Be a healthy weight

If you are overweight, losing even a small amount of weight, and keeping that weight off, will help to reduce the amount of glucose in your blood. Your aim should be to lose between 5% and 10% of your starting weight.

For example, if you are 89 kilos (14 stone), you should aim to lose between 4 – 9 kilos (10 – 20lbs). The best way to lose weight is slowly, for example 1 – 2 kilos (2 – 4lbs) a month over three to six months.

Eating a healthy, low fat, low sugar, high fibre diet and doing some exercise on most days of the week is the best way to help you reach your target weight. You may need to do 60 minutes of exercise a day to lose weight.
Are you the right weight for your height?

Use the chart below to check if you are a healthy weight or if you need to lose some weight.

**Waist size**

The higher your waist measurement, the higher your risk of developing diabetes and heart disease. Measure your waist by wrapping a tape measure around your waist circumference, over bare skin, about one inch above your belly button.

<table>
<thead>
<tr>
<th></th>
<th>Ideal waist size</th>
<th>Increased risk</th>
<th>Greater risk</th>
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<tbody>
<tr>
<td><strong>Female</strong></td>
<td>Less than 32&quot; (80cm)</td>
<td>32 – 35&quot; (80 - 88cm)</td>
<td>More than 35&quot; (88cm)</td>
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<tr>
<td><strong>Male</strong></td>
<td>Less than 37&quot; (94cm)</td>
<td>37 – 40&quot; (94 -102cm)</td>
<td>More than 40&quot; (102cm)</td>
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Include some starchy, high fibre foods at each meal, for example wholemeal bread, wholegrain cereals, potatoes, wholegrain rice or pasta. These starchy, carbohydrate foods are broken down to blood glucose – the more of them you eat, the higher your blood glucose levels. Have similar amounts of carbohydrate in your diet from day-to-day and control your portion size.

Breakfast
Two slices of wholegrain toast or three dessertspoons of dry porridge oats and one slice of wholegrain toast.

Lunch or Tea
Two slices of wholegrain bread or a medium multi-grain bread roll.

Dinner
Two medium potatoes or six dessertspoons of cooked rice or pasta.

For further advice on portion sizes, see the new Healthy Eating Guidelines on www.indi.ie
**Eat less sugar in foods and drinks**

The table below shows reduced or sugar-free foods that you should choose.

<table>
<thead>
<tr>
<th>High sugar foods to avoid</th>
<th>Foods to choose instead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar, glucose, treacle</td>
<td>• Artificial sweeteners such as Candarel, Hermesetas, Natrena or Splenda</td>
</tr>
<tr>
<td>Large quantities of jam, marmalade, honey</td>
<td>• Reduced sugar jam and marmalade • Pure fruit spreads such as Fruitfield, Weight Watchers, St. Dalfour, Kelkin • Small amount of ordinary jam, marmalade or honey</td>
</tr>
<tr>
<td>Sugar and honey coated breakfast cereals such as Crunchy Nut Cornflakes, Frosties, Coco Pops, Sugar Puffs</td>
<td>• High fibre breakfast cereals such as porridge, Weetabix, Shredded Wheat, Bran Flakes, unsweetened muesli</td>
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<tr>
<td>Sweetened fruit juice</td>
<td>• A small amount (100mls) of pure, unsweetened fruit juice</td>
</tr>
<tr>
<td>Regular minerals and squashes</td>
<td>• Diet, light, or slimline minerals such as Sprite Zero, Pepsi Max, Fanta Light or Diet Coke • Sugar free flavoured water • Reduced sugar or sugar-free squashes such as Robinson’s Special R, Mi-Wadi No Added Sugar, Ribena Toothkind, Dunnes/Tesco No Added Sugar</td>
</tr>
<tr>
<td>Drinking chocolate, Horlicks, Ovaltine</td>
<td>• Cocoa made with semi-skimmed milk and sweetener • Options, Highlights</td>
</tr>
<tr>
<td>Tinned fruit in syrup</td>
<td>• Tinned fruit in own juice (not in syrup), unsweetened stewed fruit or fresh fruit</td>
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</tbody>
</table>
Eat less sugar in foods and drinks (continued...)

<table>
<thead>
<tr>
<th>High sugar foods to avoid</th>
<th>Foods to choose instead</th>
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<tbody>
<tr>
<td>Ordinary or low fat yogurt</td>
<td>• Natural yogurt or lower sugar varieties such as diet Yoplait, diet Irish Yogurts, Muller Light, Tesco Healthy Living, Yoplait 0%, Weight Watchers, Marks and Spencer ‘Count on us’, Onken Bio Pot Lite</td>
</tr>
<tr>
<td>Probiotic drinks</td>
<td>• Actimel 0%, Yakult Light</td>
</tr>
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</table>
| Puddings                                   | • Angel Delight No Added Sugar  
• Sugar-free jelly  
• Fresh fruit salad  
• Stewed fruit sweetened with an artificial sweetener |
| Cakes, biscuits and pastries               | • Plain biscuits (not more than one or two a day) such as Goldgrain, Marietta, Rich Tea, Fig Rolls  
• Wholewheat cracker, oatcake or rice cake  
• Small slice of fruit brack or small scone (if you need to lose weight, only have these occasionally). |
| Sweets and chocolates                      | • Sugar-free Polo Mints, Aqua drops, Sula  
• Sugar-free gum  
• Fisherman’s Friend sugar-free  
• Halls or Tunes sugar-free (only eat these occasionally) |

**Note:** You should not eat special diabetic foods such as diabetic chocolate, sweets, cakes, biscuits and jam. These foods are expensive, can be high in fat and if taken in large amounts can cause diarrhoea.
Reduce fat intake

Having Pre-diabetes increases your risk of heart disease. Eating less fat in your diet will lower your blood cholesterol level and your risk of heart disease. Also, if you need to lose weight, cutting down on fat will help you to achieve and maintain a healthy weight. Saturated fats should be limited and replaced by unsaturated fats, predominantly monounsaturated fats.

<table>
<thead>
<tr>
<th>Foods to avoid</th>
<th>Foods to choose instead</th>
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</thead>
<tbody>
<tr>
<td>Butter, lard, dripping, hard margarine</td>
<td>• Lower fat spreads – choose mono or polyunsaturated spreads such as Low Low, Avonmore Extra Light, Flora light, Golden Olive, some supermarket brands (check label)</td>
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<td></td>
<td>• Products containing plant stanol or sterol esters (2-3 g/day) such as Benecol, Flora Pro-activ may help to lower your blood cholesterol level (talk to your GP or Dietitian).</td>
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<td>General vegetable oils</td>
<td>• Small amounts of olive or rapeseed (canola) oil. All oils, including ‘healthy’ oils, are high in calories</td>
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<td>Whole milk</td>
<td>• Low fat, light or skimmed milk, low fat Supermilk</td>
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<td>Fried eggs, scotch eggs</td>
<td>• Boiled, poached or scrambled eggs</td>
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<tr>
<td>Full fat sweetened yogurts, Greek yogurt, cream, crème fraiche</td>
<td>• Plain yogurt</td>
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<td>• 0% fat, unsweetened diet yogurt</td>
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<td></td>
<td>• Lower fat fromage frais</td>
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<tr>
<td>Full fat hard cheeses, soft cheeses, cream cheese</td>
<td>• Low fat cheeses such as Edam, Gouda, Feta, Mozzarella</td>
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<tr>
<td></td>
<td>• Reduced fat cheddar</td>
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<td></td>
<td>• Cottage cheese</td>
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<td>• Lower fat or light cheese spread</td>
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Reduce fat intake (continued…)

<table>
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<tr>
<th>Foods to avoid</th>
<th>Foods to choose instead</th>
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</table>
| Salami, pate, sausages, sausage rolls, black and white pudding, luncheon meat, meat pies, streaky bacon. Any fried meats | • Lean meats (cut off fat)  
• Chicken and turkey (no skin)  
• Liver, offal  
• Lean mince (drain fat off) or soya mince  
• Peas, beans, lentils and nuts |
| Fried fish or fish in batter                                                   | • Fish, fresh or frozen*  
• Tinned fish in tomato sauce, water or brine                                           |
| Chips, roast potatoes, fried rice or fried noodles, fried bread                | • Boiled, baked or mashed potatoes (without added butter or margarine)  
• Boiled rice, pasta or noodles  
• Wholegrain bread and pitta bread                                                 |
| Cakes, pies, pastries, biscuits, chocolate, fudge, toffees and crisps         | • Scones, malt loaf, brack, plain popcorn                                               |
| Mayonnaise, salad cream, fatty gravy, sauces                                   | • Small amounts of very low fat mayonnaise and salad cream  
• Fat free dressings  
• Small amounts of oil and vinegar dressings, gravy powder or granules, mustard or low fat or tomato sauces |

* Try to eat oily fish twice a week. These fish contain a type of fat called omega-3 fat which is good for your heart. They include salmon, sardines, herring, mackerel (including those in tins), trout, fresh tuna (not tinned unless omega-3 is added) and kippers.
Eat at least 5 portions of fruit and vegetables each day

Vegetables, salads and fruit have fibre and the vitamins A, C and E, which help to protect your heart. You should eat a good variety every day, but you can have only one small glass (100mls) of unsweetened fruit juice or a smoothie each day.

One portion is one of these:

- One medium fruit such as apple, pear, orange, banana
- Two small fruits such as kiwi, plums, mandarins
- One handful (around ten) of grapes
- Three tablespoons vegetables
- One bowl of salad
- Two tablespoons fresh fruit salad or tinned fruit (in own juice)
- One tablespoon dried fruit such as prunes, apricots, raisins
Limit how much alcohol you drink

The weekly limits for alcohol are up to 11 standard drinks a week for women and up to 17 standard drinks a week for men. Do not have more than five standard drinks at one time and have three alcohol-free days each week.

One standard drink is:

- One small glass (100mls) wine
- A half pint beer or lager
- A pub measure of spirits

Avoid sweet alcoholic drinks such as cider, liqueurs, port, alcopops, Bailey’s, sherry and sweet wines. Choose diet or slimline mixers for spirits and avoid low sugar beers as these are high in alcohol.

Sample meal plan

**Breakfast**

- Bowl of breakfast cereal such as porridge, Weetabix, Bran Flakes, Shredded Wheat with low fat milk and/or wholegrain bread or toast with small amount of low fat spread and reduced sugar jam or marmalade or a small amount of ordinary jam or marmalade.
- Egg – boiled, poached or scrambled, or Bacon (remove fat), tomato and mushrooms – grilled.
- Fresh fruit

**Lunch or Tea**

- Homemade vegetable soup
• Wholegrain bread, roll, bap or pitta bread with low fat spread
• Cheese (preferably low fat), ham, turkey, tinned salmon or sardines, or beans, or egg – boiled, poached or scrambled, or bacon (remove fat), tomato and mushrooms – grilled.
• Always include salad such as lettuce, tomato, onion, cucumber, peppers, sweetcorn or other vegetables.
• Use a small amount of fat free salad dressing or extra-light mayonnaise

Main meal

• Potatoes – boiled, baked or mashed with low fat milk only or pasta or rice. Do not have roast potatoes or oven chips more than once a week.
• Large portion of vegetables or salad
• Fish or chicken (remove skin) or meat (remove fat) – not fried.
• Fresh, tinned (in own juice) or stewed fruit, diet yogurt or sugar-free jelly

Snacks (not always necessary)

• Fruit (fresh or tinned)
• Diet yogurt
• Plain biscuits – no more than one or two a day
• One slice of wholegrain bread or toast with a scrape of low fat spread or low fat cheese spread, tomato, banana or reduced sugar jam or a small amount of ordinary jam.
• One or two crispbread or Ryvita with a tomato, banana or low fat cheese spread
• Small bowl of suitable breakfast cereal with low fat milk
• Drinks such as tea, coffee, water, diet minerals
Results of your annual check-up

You should have a check-up every year with your doctor.

**Record your results in this table.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Fasting Blood Glucose (mmol/l)</th>
<th>2-hour Glucose (mmol/l)</th>
<th>HbA1c (mmol/mol)</th>
<th>Weight (kilos)</th>
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