

**LIFESTYLE PRESCRIPTION**

**YOUR GUIDE TO A HEALTHIER LIFESTYLE**

**FIRST THE SCIENCE.........**

Millions of us have high blood sugar (glucose) levels, many without knowing it.

Running a high blood sugar is bad for our health. It leads to something called **insulin resistance.** When we eat a meal containing glucose our pancreas releases the hormone insulin. Insulin tells our body cells to burn the glucose and stops us from burning fat until our blood glucose level returns to normal. But insulin is also a **'fat storing'** hormone. If we have eaten a meal high in glucose we need to store what we don't use. This has to be converted first to fat. The body stores the fat under the skin, but if these stores fill up over time, the fat has to be stored elsewhere - mainly in our livers and pancreas where it is known as **'visceral fat'.**

Visceral fat is bad news. Abnormal fat in the liver, pancreas and muscles means our bodies become less able to lower blood glucose which tricks the body into releasing more insulin over longer periods of time; this is known as **insulin resistance.**

**All this adds up to an increased risk of Type 2 diabetes, abnormal cholesterol and triglyceride levels, high blood pressure, stroke, heart attacks, obesity, some cancers, fatty liver, dementia and possibly more!**

**WE ARE WHAT WE EAT**

Foods fall into three main groups - Carbohydrates, Proteins and Fats

Proteins and fats have no effect on blood glucose.

But when carbohydrates are digested blood glucose levels rise. Our cells need glucose for energy; just not too much! So, can you see where this might be leading?

Cutting down on your carbohydrate intake and choosing the right type of carbohydrate should reduce your blood sugar levels and in time, allow your body to burn more of its unhealthy visceral fat.

**What sort of foods are carbohydrates?** They fall broadly into two main categories:

'Easily digestible' carbs - these are rapidly absorbed by your body and produce an instant spike in blood sugar. They include the sugar you add to your tea, sugars in fizzy drinks and fruit juices, and 'natural sugars' such as honey, maple syrup, agave etc. But you might be surprised to learn they also include starchy foods such as potatoes, rice, bread and pasta.

'Complex unrefined' carbs - these carbs contain lots of fibre making them harder to absorb which does not produce the spike in blood sugar we are trying to avoid. Examples include legumes, vegetables and whole grains.

**Eating more fibre will help keep your insulin levels low.** Fibre is the part of a plant based food we cannot fully digest. It slows digestion, reduces blood glucose and cholesterol. It also stimulates gut hormones which will reduce your appetite and stop you feeling hungry - this takes about 20minutes so it helps to eat more slowly. Diets high in fibre are associated with lower levels of heart disease, stroke, Type 2 diabetes and bowel cancer and have been shown to aid weight loss.

**Exercising your muscles burns glycogen (stored glucose).** The longer and harder you exercise the more you burn. For up to 48hours after exercise, your muscles will be re-storing glycogen - over this period blood glucose levels will be lower and insulin sensitivity improved. Taking regular exercise is therefore important to maintain this process

**YOUR STEPS TO A HEALTHIER LIFESTYLE**

Think carefully about the changes you are planning to make to your lifestyle. If you prepare well you are more likely to succeed in making the changes permanent.

**STEP 1**

* Get the rest of the family involved in your plans; they will benefit from healthier food and might even join you when you exercise!
* Clear your kitchen cupboards of sugary and processed foods and snacks, that way there's less temptation
* Start exploring cookbooks and websites (see later) for useful recipes; it will take a while to change your cooking habits
* Follow a list when you go food shopping and just buy what you need for those recipes- you will find you no longer visit certain aisles of the supermarket and won't miss them....!
* Aim to buy and eat mostly 'real food'. Think before you eat something made in a factory.
* Get used to reading food labels, avoid added sugar, choose high fibre and low carbohydrate options; don't fall for 'low fat' products - they are generally high in sugar.
* Remember alcoholic drinks contain lots of sugar and are best avoided or drastically reduced
* Expect your taste buds to take several weeks to adjust to the reduction in sugary foods - the cravings will go

**STEP 2**

* Choose smaller plates for your meals from now on
* Stick to 2 -3 meals a day and avoid snacking; if you eat the right balance of foods you won't feel hungry
* Eat your meals seated at a table, not in front of the television or a screen; think about what you are eating and eat slowly
* Drink lots of water (6-8 glasses) throughout the day - avoid flavoured or diet drinks as you are trying to wean your need for sugary tastes
* Start the day with eggs - no need for toast, they can be scrambled/poached/boiled or made into an omelette - add mushrooms, a few unsalted almonds or walnuts and a sprinkle of chilli or curry powder/turmeric for more flavour. You will feel full for longer than cereal or toast
* If you have porridge make sure you use rolled wholegrain (not instant) oats and flavour with a few blueberries
* Aim to eat high quality proteins - oily fish (mackerel, salmon, sardines, non- tinned tuna), shellfish, chicken, turkey, lean pork and beef cuts, eggs. Other protein-rich foods include Quorn, edamame beans, soya and hummus. Limit your intake of processed meats (bacon/sausages/salami) - perhaps no more than once a week - there is a potential link with bowel cancer.
* Fill up your plate with plenty of vegetables - green leafy (brocolli/cabbage/lettuce) and other 'above ground' vegetables and aim for a wide variety of colours
* Switch your refined starchy 'white' carbs and replace with wholegrains - wild rice, buckwheat, bulgur wheat, whole rye, whole grain barley, quinoa. Use these as a base for salads. Use legumes as you might have used rice or pasta - eg green lentils, chickpeas, kidney beans etc, quantities in moderation
* If eaten, reduce starchy carbs to no more than 10% of the plate
* Eat more healthy fats and oils - for cooking use olive/rapeseed/coconut oil; for salad dressing use extra virgin olive oil; flavour with lemon, chilli, pepper, garlic. Avoid margarine - use butter. Cheese is OK in moderation.
* Cut out sugar, sugary treats, sugary/fizzy drinks and desserts and snacks - no cakes, doughnuts, biscuits, pastries, dried fruit, fruit flavoured yogurts/yogurt bars and most breakfast cereals; avoid bottled cooking sauces
* Full-fat plain Greek yogurt with some berries, and sprinkling of seeds/unsalted nuts makes a good replacement dessert or breakfast
* Limit sweet/tropical fruits - one portion a day - berries, apples and pears are best

**STEP 3**

* Aim for at least 30g of fibre a day
* Fibre is found in plant based foods - wholegrains, seeds, nuts, vegetables and fruit

**STEP 4**

* Try to take at least 30 minutes of exercise every day
* You don't have to spend lots of money on gym membership - brisk walking is fine
* Try to walk after a meal - this reduces blood glucose and insulin levels more effectively than walking before a meal
* Reduce the time you spend sitting and aim to do some muscle building exercises every day

*Tips:*

*  *Why not buy a pedometer or exercise monitor like a Fitbit or Jawbone?*
*  *Download an app to your smartphone to remind you to drink water*

**WANT TO KNOW MORE?**

The following websites and publications will give you more background information, tips and useful recipe ideas:

* www.diabetes.co.uk (low carb approach)
* www.dietdoctor.com
* The 8-week blood sugar diet by Dr Michael Mosley
*  The Diabetes Revolution: A ground breaking guide to breaking your insulin dependency by Dr Charles Clark
* ·www.nhs.uk/livewell/Pages/Livewellhub.aspx

*Useful apps for your smartphone :*

 *Myfitnesspal*

 *Mapmywalk*

 *Strava*

 *Change4Life—Food Scanner*

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**CAUTION**As you read more about this subject you may come across information about very low calorie approaches to reversing pre diabetes and Type 2 Diabetes. **Before embarking** on any radical changes to your lifestyle, discuss with your doctor or specialist nurse if any of the following apply to you:

* You are diabetic on insulin or tablets
* You take WARFARIN
* You are taking medication for blood pressure
* You are pregnant or breastfeeding
* You have or have had an eating disorder or significant psychiatric illness