



Module 4 Summary:

Understanding Effective Exercise

Checklists:

Before you move onto this module, have you:

- Read the module lesson from previous module?
- Watched the education video?
- Completed the legs or combination of sessions at least 3 times last week?
- Had a 90% adherence rate to the new habit, adding a vegetable to each meal?

Completed the previous modules assignments:

- o Complete video: leg workout.
- o Review information sheet: Calorie counting antidote.
- o Review information sheet: Vegetable phytonutrient cheat sheet.
- o Weekly adherence sheet - week 3.

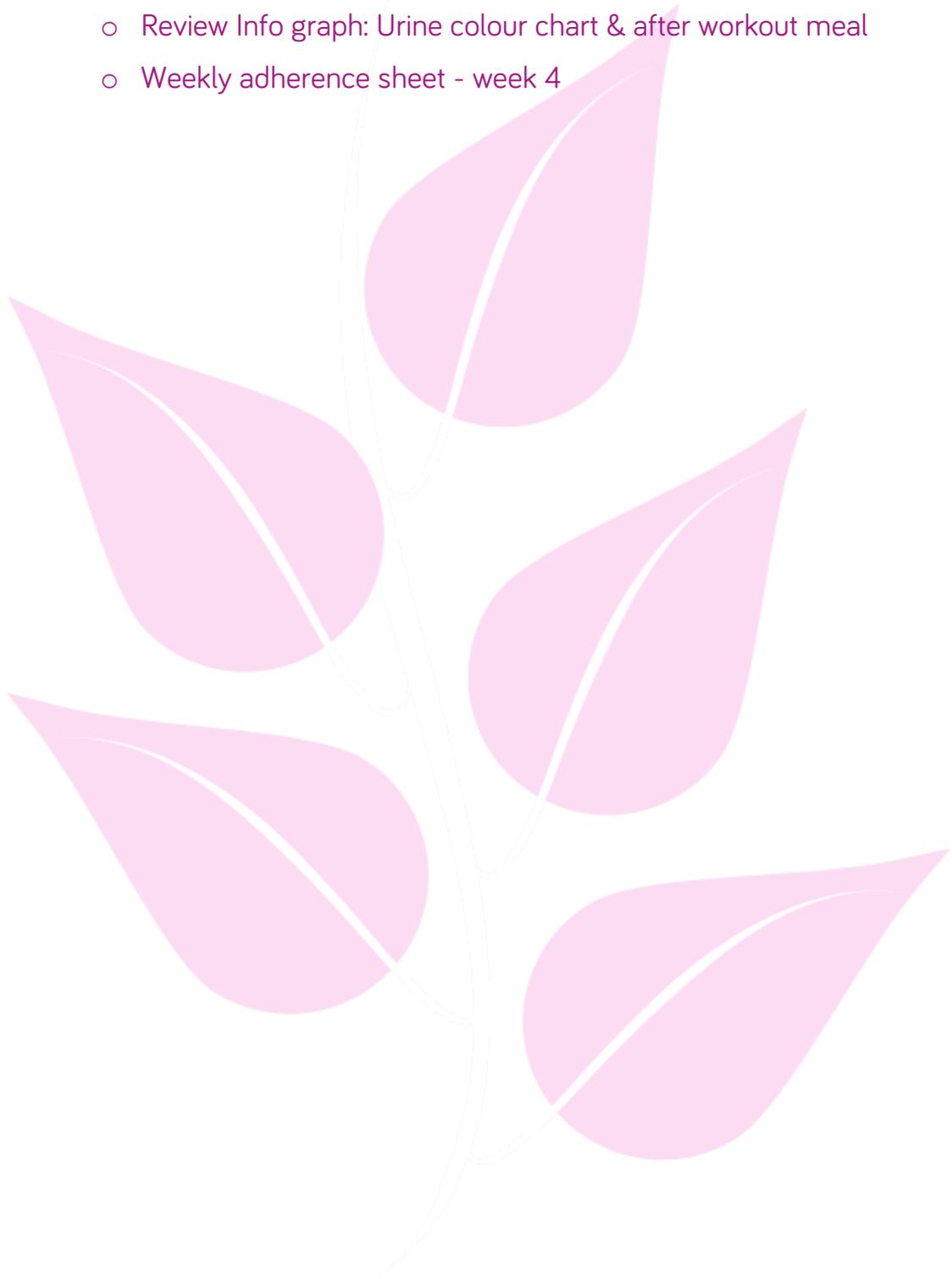
This week we are going to look at improving your exercise routines and look at the three exercise elements: strength, cardio vascular and flexibility. You need to work on all 3 elements not focus on one, to exercise effectively and safely. Workout drinks - do you need one and how to make your own?

Then move on to your habit of eating more starchy carbohydrates after exercise. Eating less bread, pasta and gaining your carbohydrates from vegetables before you exercise.

Look at GI of carbohydrates to help understand which carbohydrates are more nutrient based.

Homework assignments this week is:

- Complete video: Back exercise
- Review Info graph: Urine colour chart & after workout meal
- Weekly adherence sheet - week 4



Module 4 : Understanding Effective Exercise

Habit 4: Eat majority of other carbohydrates after exercise

Exercise of the week: Back health

Before you tackle this weeks nutritional habit, let's talk exercise, my favourite subject and soon to be yours!

It is extremely important for everyone – children and adults (younger and older) – to be active. So set a great example to the rest of your family with your activity levels and encourage those around you to get more active. Be the inspiration to your loved ones.

I am not suggesting that you enter a half marathon (although if you are tempted I would love to encourage you). I am suggesting that you keep your daily activity levels up; keep moving and your health and levels of vitality will improve.

If your body is moving well you will repair well, if you are oiling your joints with activity you are more likely to be injury free. It is when your body becomes stiff from inactivity or repetitive use that the joints and body are negatively affected.

Those athletes who have exercised like crazy on the one sport – running is classic, but also yoga, create repetitive strain or undue tightness (running) or hyper mobility (yoga).

Their wonderful bodies have been accustomed to working hard in one particular way; an over used lower back from yoga and tight hamstrings and quads (legs!) from running.

Specialising in one sport is not healthy.

On the other extreme, those who have never exercised regularly and hope to stave off health issues by starting, can't expect great instant success, and complete a workout easily. It takes time and effort. The more practice and with a little discipline (and hand holding) the easier it becomes.

The quicker you start getting active the more chance you have being healthy – keeping illness and injury at bay, think of prevention rather than cure.

Strap on those pedometers or maybe you have already gone up a gear into a 'fitbit' or something similar? Recording your daily activity should be a firmly entrenched habit now!

Activity levels have a huge impact on your health but also releasing the feel good hormone so you enjoy a great sense of well being. It is hugely beneficial to get into the habit of doing some regular and enjoyable physical activity. I would love to suggest that you do something every day, which is why my first challenge, is the walking challenge. Start slow and build up.

The reason I set the walking challenges as the first Gorgeous challenge is so you can appreciate how active you already are. That feeling of positivity leads on to greater and bigger things and even more personal challenges and achievements.

Yale University performed an experiment to study the brain effects of positive exercise stimuli on the staff of seven different hotels. Half of the participants were informed about how much exercise they were getting every day through their work - how many calories they burned the positive physical outcomes of their work by suggesting how similar hovering is to a workout etc.

The other half was given no such information.

Several weeks later, the study found that the first group who had been primed to think of their work as exercise had actually lost weight. Incredibly, these individuals had not done any more work or exercised any more than the control group (their colleagues who had not been informed about how their work was similar to a workout).

So that raises the question – what can you do to benefit from this?

Daily affirmations - once you start believing you are active, your brain will agree and you will become more and more active. This belief and positive affirmations will lead you to be more active.

Don't forget (I am sure you can't) but as you age your metabolism begins to slow down so burning fat and losing weight becomes harder. The 'meno' tummy starts to appear if you have not increased your activity level to counter the hormonal changes.

The hormones responsible for all of your youth-like qualities such as healthy skin tone, strong lean muscle, robust energy and sex drive start declining more each year. Sorry gals.

Without exercise your muscles become weaker through lack of use and then the muscles can't support your bones and your joints. The ageing process exacerbates this process; ageing takes out important minerals that are essential for your strong bones. You can slow this process and stop the depletion of minerals if your body knows that you still need them by exercising.

It's not just your body that is negatively affected by ageing...your brain suffers too. Problem solving, decision making skills and your memory are all affected, but if

you are learning something new each week – one new exercise or a new warm up routine, plus you are keeping the blood and its nutrients flowing through your body and brain, this ageing effect is reduced.

On the positive side, exercise is the answer (well I would say that ;-)

Joseph Pilates believed firmly that slow moving exercises were great for your overall health and in particular your immune system.

He preferred Pilates but you could easily include Tai Chi and yoga in this comparison.

These types of exercises stimulated the body's lymphatic system. The lymphatic system is part of the circulatory system and an important part of your immune system. He taught that gentle, flowing movement gently stimulates the lymphatic system.

Joseph based this claim on the influenza break out after World War 1, during the war he was interned as an enemy alien on the Isle of Man. And whilst the influenza pandemic of 1918-19 killed more people than the Great War, Joseph and his mates in the camp remained well and healthy.

Joseph encouraged everyone to exercise daily, even those that had injuries. Ripping out the beds from the camps, he took out the springs and used the beds as his first 'Pilates reformers'.

On his return to Germany, Joseph was asked to train the Kaiser's secret police. He wasn't too keen on that so he hopped over to America with his missus – good move Joseph.

Personally whilst teaching Pilates (for over 18 years) I have had to cancel only two classes due to illness (food poisoning whilst pregnant). Simply put I don't get ill. I teach over 250 people a week and I might suffer the old sniffle and cold that my lovely clients or children playground bugs bring to me, but I don't suffer with illness.

Interestingly after the first year of running, I became ill with bronchitis. It took my body a while to catch up with intensity that the sport required of my body. I am not saying don't run, I am saying watch how it affects your body. Start slow and build up.

So in conclusion, exercising helps to:

- ✓ Boost your metabolism and helps your body burn fat.
- ✓ Helps you to feel great.
- ✓ Keeps your bones, muscles and joints healthy.
- ✓ Stimulate your endocrine system - which is the collection of hormone producing glands that regulate your metabolism and sleep and mood amongst others.
- ✓ Increase bone density.
- ✓ Live longer and more healthily.
- ✓ Promotes good co-ordination, muscle strength, flexibility, and core stability.
- ✓ Decrease the risk of coronary heart disease, stroke and diabetes, and the associated risk factors such as hypertension.
- ✓ Boost your brainpower, enhancing memory and improving your cognitive function making you as sharp as a sharp thing on a sharp day!
- ✓ You'll reduce your body's ageing process – you will feel that your biological age will be slower than your chronological age.

So let's get exercising....

Let's get walking. You have started to clock your steps over the last few weeks and all I have requested is that you note the number of steps. There are no judgements, just observation.

How many steps have you taken each day, can you see a pattern?

Are you remarkably similar each day?

Can you get your 'steps' record to hand? Have you thought about increasing the number of steps over the last few weeks?

Please tell me you have been recording them. The excuse that the 'dog ate it' or 'it went in the washing machine' won't work, you are too long in the tooth for that. I spent a VAST amount of money researching and purchasing the highest tech 'pedometer' so don't tell me the battery is flat 😊

If the pedometer doesn't suit you for whatever reason, consider investing in yourself; buy one that does suit you. Or use an app on your smart phone. Find something that works for you and wear it everywhere, every day. Remember new habits take at least two weeks to cement, so we need to start bedding in this walking habit.

Start parking further and walking to work, walk the dog, walk the children. Maybe you could also consider investing in buying a dog, or borrowing a kid!

Walking is great for you, saves you money, always keen to do that. Think of all those car journeys and the petrol money you can save. Plus, it gets you out and about. I have a lovely group of walkers who come en masse to my Pilates class – rowdy, fun bunch 😊.

Join a walking group; there are loads online. My mum is in a group in Edinburgh. There is a group in my village. They are ubiquitous.

- Doesn't fit your lifestyle?
- Don't have one near you?

Then why don't you make one up, find some mates or find a mum and baby walking group, go out at lunchtime – how about a walking meeting?

Instead of meeting up with pals for a coffee and cake, you will get to the heart of the matter much more quickly if you chat and walk.

Have you noticed (on the movies – or maybe you are like me and had a few counselling sessions) psychologists and counsellors always put their chairs on an angle so there is no direct eye gaze? It helps people to open up. So walking side by side, and then chatting through troublesome teenager or annoying work colleague problems, might help to bring more clarity and a positive outcome.

Let's get specific....

What does a 'sedentary lifestyle' actually mean? Well obviously that doesn't apply to you, because you walk every weekend, totter to the shops and play with kids.

ERMMMM think again. Ideally you need to work up to 5 hours of exercise a week, stretched across 3 different exercise types. 5 hours 5 hours 5 hours!!

That is not what the NHS advises, that is way too much. I just wanted to sow the seed. Here are the NHS guidelines:

NHS GUIDELINES FOR adults aged 19-64:

To stay healthy, adults aged 19-64 should try to be active daily and should do at least 150 minutes/2.5 hours of moderate aerobic activity such as

cycling or fast walking every week, and strength exercises on two or more days a week that work all the major muscles (legs, hips, back, abdomen, chest, shoulders and arms).

These guidelines are the minimum to keep us healthy, but we need to stretch ourselves a little further if we want to raise our metabolism and start taking better shape and making healthy internal changes.

So I am going to suggest that you consider walking every day PLUS try to include three exercises routines a week. It would be great if you could try three different exercise workouts per week - one flexibility class, one weights class and one sweaty class or really fast walk of about 1/2 hour.

Of course these three elements don't have to be exercise classes - walking, cycling, swimming or running can cover your cardio as long as you are moving so fast that you are breathing quite hard.

I am sorry honey but breaststroke doesn't count. You are not out of breath and the impact on your muscular and skeletal frame is not good either. Breaststroke is very bad for your neck and the angle you are pushing your knees out isn't great for your body either.

So a good strong swim like front crawl, fast walking or running and you can tick your cardio box.

Exercise platforms essential to injury prevention and weight loss

The three exercise platforms that you need to alternate to get the best from your exercise program.

- ✓ Weights - weight bearing or resistance training e.g. Body Pump or weights in class. Or you could be one of those crazy ladies that wear purple and power walks with hand weight in her hands. I want a photo!
- ✓ Cardiovascular exercise - getting out of breath! e.g. walking very fast – I mean VERY fast!
- ✓ Flexibility & Stretching - e.g. Yoga or Pilates

Combining and alternating these types of exercise will help increase your muscle mass, which will in turn increase your metabolism and burn more fat. If your body gets used to a routine, you will plateau. You are not being stretched so your body stays the same – homeostatis.

Most people tend to specialise. You see a beautiful yoga body, but they don't get any cardio vascular work. You see a great runner's body yet they can't touch their toes. So don't go for one type of exercise, you need all three for true overall health and fitness.

Exercise for busy lives

You are going to work towards short and targeted exercises. You will have noticed over the last four modules that you have been working through short, exercise videos.

Keep working on these videos, work on one a week and make sure you know what you are doing and then progress to the next module.

Workout drink - MAKE YOUR OWN!

If you are aiming to work out hard and fast you may need to replace lost minerals, electrolytes. If your work out makes you sweat a lot, then consider adding:

Viridian Sports Electrolyte Fix to your water bottle - half a teaspoon in a litre of water. Electrolyte replacement has changed my life. I used to suffer from low-level constant migraines. I noticed my sleep and migraines were worse on the evenings that I worked. My GP said it was common 'in a women of my age!' – love that phrase!

Not to be deterred I tried everything – eating protein before bed to help repair muscles, no help. I changed to eat carbohydrates before bed to make me sleepy – little effect.

My sleep is now much better and my migraines have gone – 3-6 tiny drops of electrolyte in my water bottle during the day. BINGO

If you are really having difficulty recovering from your workout, then you may need to add more protein or even a protein drink after exercise. I haven't recommended one here, but please visit your local health food store. They will supply you with plenty of information. Please don't be put off by the hench looking, bulky bloke on the front of the products. I know they can look very intimidating and off-putting. Protein powders do serve a purpose and you will find that vegans, vegetarians and ladies also use protein powders to supplement their diets, and help recovery after exercise.

I feel very uncomfortable suggesting any 'pills or potions' because my approach is one of good health. There is a place for these products if you are exercising excessively – lots of bike rides that last more than 2 hours.

Generally you won't need a protein shake but if you want to add a few scoops every now and again to say your protein pancakes as Body Coach suggests then please be wary.

Watch how your body reacts and any changes – good or bad.

Look for a product that has:

- ✓ Few ingredients
- ✓ No aspartame
- ✓ Little or no carbohydrates (unless you are exercising over a two hour period)

Nutritional work: Carbohydrates in our diet.

In the last module we looked at the food pyramid and how it had evolved over the last few decades. The food pyramid still shows over 50% of our calories coming from carbohydrates like bread and pasta.

The general recommendation from the NHS with Eatwell plate is that 1/3 plate is carbs, however some nutritional camps are reducing this and others are eradicating it completely.

You still have conflicting messages - dietary plans, like Atkins then 'Paleo' diets, and Body Coach are quite extreme and ask us to reduce carbs even further, to eat very little or zero carbohydrates.

Whilst other diet plans consider that carbohydrates are good and fats are bad like Slimming World and Weight Watchers.

Let's look to the middle ground and whilst considering that carbohydrates give you energy, especially for runners and athletes, if you are sedentary you simply don't need that amount of carbs.

The message is simple - the more active you are the more carbs you need to fuel and recover from that activity. However, you don't need that much if you have a sedentary lifestyle or you haven't exercised that day.

For really good personalised nutrition, the specific amount of carbohydrates (carbs) depends on your body size and your body type plus how much you exercise.

However, that is fine tuning for later on. For the moment and for health let's start with getting most of your carbohydrates from vegetables at each meal and saving most of your starchy carbohydrates after exercise.

What are starchy carbs?

Carbohydrates are made up of three parts: fibre, starch, and sugar.

The more fibre in your carbohydrate the better. The nutrient content of your food rises with the fibre and starchy elements.

Fibre and starch are complex carbs, while sugar is a simple carb.

Starchy carbohydrates are also known as complex carbs and include brown rice and pasta, beans, oats, quinoa, grains plus legumes (lentils, split peas, kidney beans and chickpeas)

Sugars are simple carbohydrates, things like honey, sugar for your tea and coffee and of course, even though they are more nutrient-rich, fruit and dried fruit.

The body doesn't need to process these simple sugars as it turns the sugar into glucose very quickly; your body gets a very big, quick hit. Your insulin response is immediate and large.

There is no energy required for the body to turn these sugars into glucose, so you have the double effect of immediate response for no effort.

This is great if you are looking for a quick fix on a run – and why you see jelly babies or harribos being handed out for runners to get them round the course on

marathons or half marathons. It takes very little effort for the body to change these sugars into fuel or fat if you are not using the fuel.

How often do you need a quick sugar high?

So carbohydrates are broken down by the digestive system into simple sugars. The more fibre and starch in the food the longer this takes and it helps to use the full function of your bowels.

The more fibre in the food the longer it takes the body to breakdown, it also has the beneficial effect of making us feel fuller for longer.

The body can take its time to sort out what it needs and remove what it doesn't – helping your bowel movement.

Incidentally whilst talking 'poo', be aware that you will start to 'use the facilities' more frequently, maybe even after each meal, as your metabolism works better. You will be obtaining more nutrients from your food and it is a healthier clean out for your body. One way of looking at it 😊

If you are at all concerned about increased bowel movements then please discuss with me on FB group (yeah right) or personally.

The body makes glycogen from starchy and simple sugars, after a really intense bout of exercise your body needs to replace glycogen.

So you have an option. You can drink a lucozade drink (simple sugar) and immediately lose the effect of the exercise because you have simply drunk more calories than you have burnt off.

Or you can replenish your body with complex carbohydrates, which will help you feel fuller for longer and aid your digestion.

The increase of glycogen triggers insulin which helps push your body's 'proteins' into your muscle. So straight after exercise carbohydrates are very necessary to help your body repair and recover from the exercise. However, if you are sitting on the settee after a long, hard day in the office - desk bound, then carbohydrates especially simple ones really aren't needed.

Starchy carbohydrates after exercise will help your body recover and help you burn fat in the longer term.

Too many simple sugars in your body become triglycerides, which are fatty acids.

If you regularly eat more than you burn off, you raise your triglyceride levels in the blood, which is linked to increased risk of health conditions such as heart disease, diabetes and stroke.

So reduce your simple carbohydrates, even starchy ones when you are inactive, when sitting on the sofa watching TV or working at your desk.

When you do enjoy your carbohydrates

Consider having the best quality,

Why not - you have earned them....

Whole grain starchy carbohydrates are healthier because of their higher nutritional content, levels of fibre, minerals and vitamins. Whole grain bread from a bakers mmmmmmm you can almost smell that, plus there are less additives and sugars. Try brown rice you will be surprised. You might prefer brown to white rice

Start adding legumes likes lentils, split peas, kidney beans and chickpeas to your casserole, chilli, stew or curry dishes in place of meat, which will reduce your saturated fat and the price of the meal.

Stay away from high-fat starches and fried foods like chips and French fries, breads and pizzas.

But if I can convince you to increase anything it is Quinoa - super food, superfast, super versatile, and use it instead of bread for lunch.

After exercise....

The majority of your starchy carbs should come from whole, minimally processed, carbohydrate sources and it is okay to have some carb free meals, such as salad and steak, especially if you haven't exercised that day.

Ensure that you have most of your daily carbs after exercise - if you want your slice of bread, get up and get going, earn it. Get your metabolism revved up and then eat your starchy carbs.

Plan - go for a good walk or complete your exercise download and then have your potatoes or bread.

Consider reducing the carbs that you eat in the morning i.e. sugary cereals- try a few proteins based breakfasts consider including eggs. It isn't 'low carbs'; simply discussing the timing around eating your carbs.

You are more than welcome to eat them with your meals but just think about EARNING THEM!

- Earn your sandwich after your lunchtime walk.
- Try your exercise download before your evening meal.
- If you don't want to exercise, fine, eat less carbs with that meal.
- So you always win, you are complying with the rule.

Glycaemic index of carbs....

GI stands for glycaemic index. It is a system for measuring the speed at which the body breaks down carbohydrate foods into glucose (sugar), the body's source of energy.

Foods are ranked from 1-100. Glucose (the simplest form of sugar – look out for it on food labels) has the maximum score of 100 and all other carbohydrates are measured against this

Energy & Carbs, glucose comes from all your carbohydrates not just sugary carbs. The higher the sugar the more the body panics and shifts the sugar to fat storage. Like you, your gorgeous, clever body can make glucose much more efficiently if it is able to do it in its own time - slowly. You will have more energy if your body can process gently - rushing sugar down = panic stations!

BEWARE: white bread scores 100, the same as pure sugar!

In fact, any processed food has a high sugar or GI because the processing is basically carrying out some of the digestion outside of the body before you even eat the food.

High GI carbohydrates - such as white bread or cornflakes - are digested rapidly by the body, which causes an immediate and sharp rise in blood sugar levels. Your insulin levels rise rapidly to accommodate this sugar rush. Do this over and over again and you become insulin insensitive.

Low GI carbohydrates on the other hand, such as oats or granary bread, take longer to digest and therefore release their sugar slowly and gradually into the bloodstream.

Insulin is a hormone secreted by the pancreas, which regulates blood sugar levels, and controlling insulin levels is key to the GI diet. Insulin's job is to reduce blood sugar levels by removing any excess glucose from the blood and storing it as fat.

Insulin also acts as a guardian of fat stores, encouraging the body to maintain its precious fat stores!

Eating high-GI carbohydrates and the resultant increase in blood sugar causes large amounts of insulin to be secreted. Eating mostly low-GI foods will result in less insulin production and therefore less fat storage.

High insulin levels in the body create a biochemical environment that encourages fat storage.

Blood sugar and insulin levels also affect appetite and energy levels.

When levels are balanced you feel full for longer and your mood and energy levels are more consistent.

However, the highs and lows of blood sugar and insulin produced by eating high-GI carbohydrates lead to increased appetite, sugar cravings and fluctuations in mood and energy levels.

The GI diet therefore is based on eating mostly low-GI carbohydrates and avoiding high-GI ones.

For example, a typical GI Menu

- ✓ Breakfast: Scrambled eggs on rye toast
- ✓ Snack: An apple and 7 almonds
- ✓ Lunch: Wholemeal pitta bread filled with salmon and watercress,
- ✓ Snack: Fage natural Greek yoghurt with berries.

- ✓ Snack: An oatcake with hoummus
- ✓ Dinner: Grilled salmon, brown rice, mixed vegetables.
- ✓ Snack: A glass of warm almond milk

Although GI only applies to carbohydrates, it is also influenced by protein and fat, both of which slow down carbohydrate digestion, reducing the overall GI of a meal.

In summary:

The habit for this week - have a smaller amount of carbs at each meal. In the form of starchy vegetables at meal times before exercise but save most of your starchy carbs after exercise.

If you want to eat bread, pasta and rice:

- ✓ Focus on more unprocessed varieties
- ✓ Save most of them until after your exercise

Begin to look at your food differently - earn your carbs.

Consider if you are having an exercise 'rest' day then it is okay to have a meal without any carbohydrates.

This may be hard for you to take on board, think of it as an educational process, a continuum, or a work in progress.

- Food timing, simple sugars and highly processed starches - minimise intake
- Whole foods minimally processed carbohydrates - eat soon within 1-2 hours after exercise
- Vegetables - eaten with each meal

Assignments

1. Complete video: Back exercise
2. Info graph: Urine colour chart
3. Weekly adherence sheet - Week 4

Viridian Sports Electrolyte Fix 100ml - www.viridian-nutrition.com

Adele x