

# The Little Book of Nutrition Tips



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# Introduction

I have compiled this book from all the courses I have been on, the books I have read and from practicing nutrition with clients. I have come across so much information during my training as a healthcare professional that I had to find a way to simplify it all in order to comprehend it and remember it. I like lists and protocols and condensing information into usable chunks, so I would make a list of 10 tips of information on a given topic, such as cardiovascular health or PCOS.

This book is a compilation of all this information collected over the past few years presented in an easy to understand style. It contains all the juicy practical bits of information you will need to make immediate changes in you health without the boring science. I have done the hard work for you, you no longer need to buy and read countless different books on different aspects of health as most of the information you need is in the following pages. If like me you like to simplify information or if you like lists and protocols then this book is for you.

In order to lose weight and get healthy you need first to stabilise your blood sugar levels so you can function properly throughout the day and make good food choices. You need to be getting good sources of protein, fat and carbohydrate in each meal to balance blood sugar. Next you need good digestion and detoxification so you are absorbing your food and cleaning your body. This may include eliminating food intolerances and other little nastiness in the gut, replacing any missing substances required for digestion, replenishing good bacteria and finally repairing the gut. Even if you just do these few things you will look and feel a whole lot better.

However, the final section of this book looks at certain health concerns and provides you with specific advice to help deal with things such as obesity, heart disease or female health problems.

Please enjoy my book.

Steve Hines

# Part 1

# Chapter 1

## Blood sugar

Balance your blood sugar with protein, fat and carbohydrates at every meal and snack.

Blood sugar levels are very important for providing the energy we need to go about our daily activities. Blood sugar is defined as the amount of glucose that is in the blood at any one time. All carbohydrates that you consume are broken down into sugar called glucose, which then provide energy to your muscles, heart and brain.

Blood sugar levels should stay fairly steady through the day (in the blue zone – diagram 1). Problems arise when blood sugar levels fluctuate erratically. If blood sugar levels are continually high it may mean that the hormone insulin, which signals cells to absorb glucose may no longer work properly. If blood sugar levels are low or continually up and down this can lead to energy slumps, tiredness during the day or lunchtime dips, if blood sugar levels are particularly low it is known as hypoglycaemia where you can suffer from the shakes, cold sweats and light-headedness.

An example of how poorly controlled blood sugar can affect you is described below.

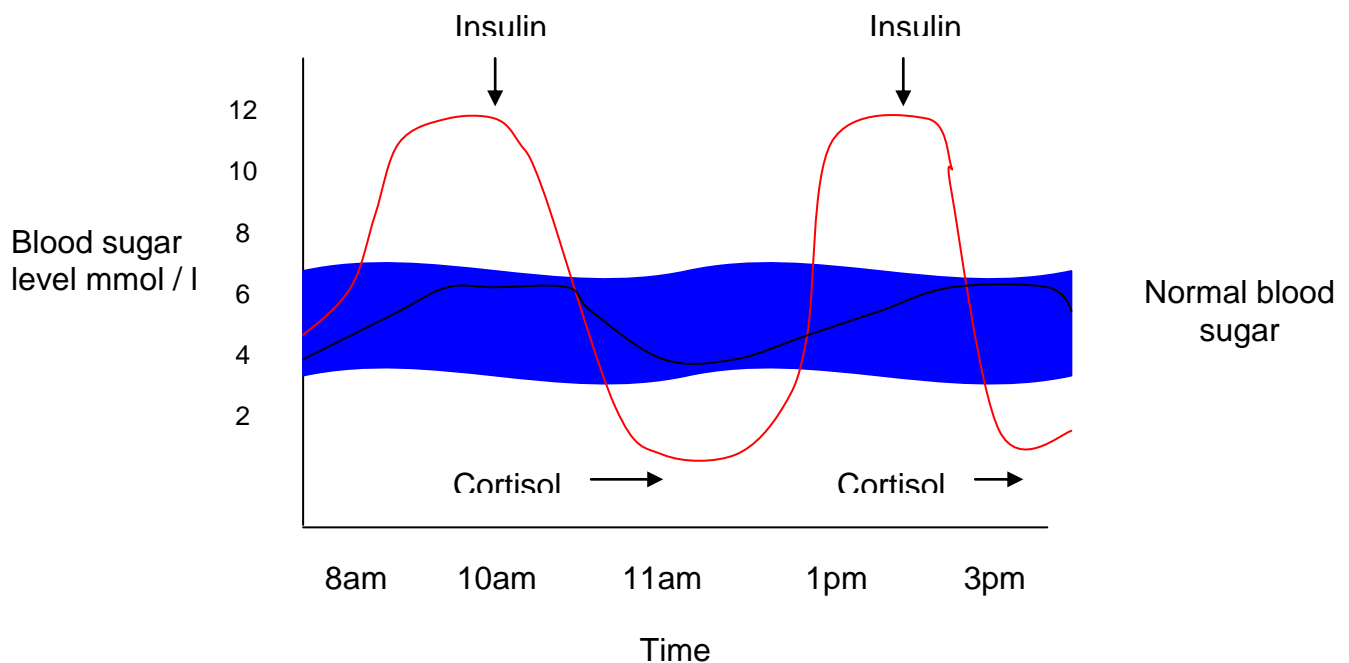


Diagram 1 blood sugar levels

You wake up in the morning and your blood sugar levels are low from overnight fasting. Ideally you eat a good breakfast and your blood sugar levels rise slowly (black line). This causes a little insulin to be released from the pancreas and insulin knocks on the doors of the liver and muscle cells asking if they will take the sugar out of the blood and in to the cells. If you are active and walked or cycled to work the muscles and liver will love the sugar as they will need it for energy. As you burn off the blood sugar and blood sugar levels begin to fall it makes you feel a little hungry so you have a sensible snack and blood sugar gently rises again. Once again as blood sugar levels begin to rise insulin is released from the pancreas, which knocks on the doors of the liver and muscle cells. This cycle of sensible eating and well-controlled blood sugar continues throughout the day and you have sustained energy and feel well.

Consider now that if you eat a lot of sugar at breakfast (the red line – the standard English breakfast of cereal, sugar, milk, toast and jam and a coffee with more sugar) your blood sugar will go through the roof, this causes the pancreas to release a lot of insulin. You sit on the bus or in the car to work and the muscle and liver cells now tell the insulin they don't need that sugar from the blood, as they are not burning it for energy. So now the insulin knocks on the fat cell's door and the fat cells welcome that sugar with open arms and convert it to fat for storage.

Because you have released a lot of insulin in response to very high blood sugar most of the sugar in your blood has now been stored in the fat cells and your blood sugar is low. This causes your adrenal glands to release the stress hormones cortisol and adrenalin. These hormones mobilise fats and proteins to the liver where they are converted to blood sugar, raising blood sugar levels once more. As you also feel hungry you have a cup of tea and biscuit or chocolate bar and the blood sugar levels get really high again. As you are now sat at your desk at work being inactive the muscle and liver cells still don't want the sugar and the fat cells mop it up again.

This cycle of high insulin putting blood sugar into the fat cells, followed by low blood sugar and stress hormone release continues throughout the day. By mid afternoon your blood sugar levels are in your boots, your energy lulls and you have a headache, feel sleepy or you're just starting to get your sugar cravings. This insulin-cortisol see-saw is a sure fire way to get fat, get bad cholesterol scores and increase risk factors for certain disease.

# 10 ways to control blood sugar

1. Eat 3 meals a day – breakfast, lunch and dinner (DON'T SKIP MEALS!).
2. Eat 2-3 snacks between meals through the day (mid morning and mid afternoon especially).
3. Each meal and snack should consist of protein, fat and carbohydrate.
4. Do not eat carbohydrates on their own (cereals, grains, fruits, cereal bars, chocolate, cakes, biscuits).
5. Reduce sugar and refined food (breakfast cereal, cakes, biscuits, pastry, chocolate and confectionary food).
6. Limit the use of grains in your meals (rice, spaghetti, pasta, bread).
7. Eat green vegetables freely (3 – 5 portions a day), only eat starchy vegetables in moderation (potatoes, sweet potato, beans, peas).
8. Eat apples, pears plums, and berries freely (3 – 5 portions a day), eat bananas, grapes, mango, pineapple and dried fruit in moderation.
9. Dilute fruit juices 50:50 with water. Fruit juices are just loaded with sugar.
10. Don't use a cigarette, sugar or caffeine as a pick me up (MAKE THE RIGHT FOOD CHOICES TO BEGIN WITH!).

How do you balance blood sugar levels? Read on. Meal suggestions for breakfast, lunch, dinner and snacks...

# 10 Ideas for breakfast

1. Cereals – porridge or muesli with a little full fat organic milk (or milk alternative). Consider trying other seeds and grains such as quinoa, flax, rice or amaranth in your porridge or muesli (see recipes).
2. Sprinkle a mix of ground flax, pumpkin and sunflower seeds on to your existing breakfast cereals for vitamins, minerals, essential fats and protein.
3. Eggs – scrambled, poached or boiled eggs on wholegrain toast. Also try an omelette with spinach, mushrooms and tomatoes. Eating eggs in moderation will not raise your cholesterol and they are a good source of protein, vitamin A, vitamin D, B vitamins, minerals, essential fats and phosphatidyl choline.
4. Mixed berries or sliced apple with full fat plain organic yoghurt and slivered toasted almonds. (Low fat yoghurts – and other low fat products are generally full of sugar).
5. A breakfast shake (see recipes).
6. Kippers on whole grain toast.
7. Sugar free peanut butter, almond butter, tahini or another seed butter spread on pumpernickel bread.
8. Smoked salmon served with scrambled eggs.
9. Gluten free buckwheat and whey protein pancakes (see recipe).

10. There is nothing wrong with a good quality grill up once a week or once a fortnight. Seek out good quality organic sausages that are 100% meat (Buy in whole foods in Kensington or my favourite – Chadwick's in Balham) or at least only have rice bran as a filler, organic bacon, steamed mushroom, grilled tomatoes and poached eggs.

# Breakfast recipes

Research has shown that breakfast cereals have very high levels of sugar and salt. Some popular brands can have up to 11g of sugar for a 30g bowl of cereal – almost 3 teaspoons of sugar. Below are some cereal ideas I have tried that are good alternatives to standard cereals. See which one you like.

## **Standard porridge**

- 8 to 10 tablespoons of oats
- 30g of whey protein
- 200ml of milk or hot water
- 1 tablespoon of xylitol
- ½ teaspoon of cinnamon
- ½ and apple
- 1-2 tablespoons of ground seed mix (flax, pumpkin and sunflower)

Mix the whey protein with a little cold water and whisk to make a frothy lump free liquid. Add hot water or milk to the oats, xylitol and cinnamon, mix together and bring to the boil. Add the whey protein and simmer for 30 seconds to a minute. Serve with sliced apple and sprinkled ground seeds.

## **Alternative porridge**

- 4-6 tablespoons of Kallo puffed brown rice ground in to a powder
- 1-2 tablespoons of quinoa flakes (optional)
- 1-2 tablespoon of ground flax seeds
- 30g of plain whey protein powder
- 1 tablespoon of xylitol
- 1 tablespoon of raisins
- 1 tablespoon of desiccated coconut

Mix the whey protein with a little cold water and whisk to make a frothy lump free liquid. Mix the remaining ingredients together and add boiling water and stir. Add the whey protein and simmer for just 30 seconds to a minute until nice and hot. Serve immediately.

## **Muesli**

Search your health food shop for sugar free muesli, especially ones made with quinoa or amaranth. Alternatively try my recipe...

- 8 tablespoons of kallo puffed rice
- 4 tablespoon of quinoa flakes
- 2 tablespoons of raisins
- 1-2 tablespoons of desiccated coconut
- 2-3 tablespoons of mixed crushed nuts (almonds, hazelnuts and Brazil nuts)
- 1 table spoon of mixed whole or ground seeds

## **Pancakes**

- 1 whole egg
- 30g whey protein powder
- 300ml water or whole milk
- 1 tablespoon of xylitol
- 2 tablespoons of ground flax seeds
- 50-100g gluten free pancake mix (buckwheat or rice flour)
- ½ teaspoon cinnamon and nutmeg

Use milk or mix the whey protein with a little cold water and whisk to make a frothy lump free liquid. Add the gluten free pancake mix and xylitol and whisk together. Beat in an egg and add the cinnamon and nutmeg. Heat a frying pan and add a little butter. Add a ladle full of the pancake mix to the pan and cook for a couple of minutes

on each side. Serve with almond nut butter, lemon juice or desiccated coconut.

## **Breakfast shakes**

These are some smoothies and breakfast shake ideas I got from nutrition expert Jonny Bowden. I have adapted them to suit my taste. See which one you like or simply experiment yourself. Put the ingredients together and zap them in a blender for 30 seconds.

### **Nut shake**

- 220ml almond milk
- 1 scoop of plain whey protein
- 1 small banana
- 2 tablespoons of almond or peanut butter
- 1 tablespoon of flax seeds

### **Strawberry delight**

- 200g of fresh or frozen strawberries
- 50ml water
- 1 tablespoon of flax seed oil
- 1 scoop of plain whey protein

### **Apple twist**

- 220ml quinoa milk
- 2 cored apples
- ½ teaspoon of cinnamon
- 1 scoop of plain whey protein
- 2cm square of root ginger

### **Coconut surprise**

- 10ml of coconut milk
- 200ml of water
- 50g mixed frozen berries
- 1 tablespoon of flax seeds

## **Berry nice**

- 220ml almond or quinoa milk
- Handful of mixed frozen berries
- 1 scoop of plain whey protein
- 1 tablespoon of flax seeds

# 10 Ideas for lunch

1. Three bean salad, falafel or a soup from the organic store or health food shop.
2. Make your own whole grain sandwich with salmon mayo and salad filling.
3. Pop in to Marks and Spencer Food and buy some ready made poached salmon or a chicken thigh and a bag of mixed salad leaves.
4. Go to the rotisserie section in the supermarket and get some spicy chicken wings.
5. Make a salad, take it to work and put it in the fridge. Use any mix of leaves, tomatoes, olives, avocado, sun dried tomatoes, cucumber, cottage cheese, sweet corn or mushrooms and throw in a tin of sardines or some boiled eggs.
6. Take some chicken broth in a flask to eat at work.
7. Make good choices in shops such as Prêt A Manger, Eat or Starbucks. Go for soups, wholegrain sandwiches or salads. Avoid muffins, bagels and cakes.
8. Find a healthy fast food cafe in your local area. Megan's at 571 Kings Road Fulham, Leon's at various sites in London and Pod in Moorgate are examples. Simply do a goggle search in your city and see if they will deliver to your work or home. There are now plenty of Whole Foods Markets, As Nature Intended and Planet Organic shops in most big cities now too.

9. Make a seafood pasta salad.
10. Simply take some leftovers from last night's dinner in a tub to eat at you desk.

# 10 ideas for dinner

1. Rib eye steak with a side salad, avocado and tomatoes.
2. Steamed or poached salmon with asparagus, wilted spinach, lightly steamed kale and horseradish.
3. Lamb shanks with roast onions, aubergine, courgette and peppers with garlic and chilli or sweet potato mash with cinnamon.
4. Roast chicken legs with quinoa or amaranth and garden pea risotto and roasted Sauerkraut and leeks with cayenne pepper.
5. Turmeric stir-fried chicken breast with onions, garlic, ginger, mushrooms and peppers served on brown rice.
6. Prawn Thai green curry with coconut milk, courgette, green beans, aubergine, basal and whole grain rice.
7. Cottage pie with garden peas, carrots, onions, and sweet potato mash topping.
8. Grilled mackerel with cauliflower mash made with mustard and butter.
9. Fried squid with onion and cayenne pepper served with a salad, sun dried tomatoes and olives.
10. A large salad with boiled eggs, cold cuts of meat, sauerkraut, coleslaw and cottage cheese.

# 10 Ideas for snacks

Mix and match any of the ideas below for healthy snacks that give you sustained energy.

1. If blood sugar is an issue stick to apples, plums, pears or berries. Otherwise any fruit with a handful of nuts or seeds such as pistachio nuts, cashews, almonds or macadamia nuts or sunflower, pumpkin and sesame seeds.
2. Vegetable crudities such as carrots, peppers, courgette, cucumber or celery with humus.
3. Celery sticks smeared with almond butter.
4. A boiled egg with an apple.
5. Sardines or mackerel pâté on rice cakes.
6. Trail mix with dried apricots, raisins, coconut slivers, nuts and seeds.
7. Bean cakes or fish cakes.
8. Chicken drumsticks with guacamole.
9. Lentil pâté or bean paste on oatcakes.
10. Falafel.

## Other ideas and snack recipes

Also try mashed avocado, cottage cheese, liver pâté, mashed canned beans, nut butter, seed butter or tahini on rice cakes, oatcakes or with other crudités.

### **Sardines or mackerel pâté**

- Tin of sardines or mackerel in tomato sauce
- Dash of olive oil
- ½ teaspoon of cayenne pepper or turmeric
- Salt and pepper

Empty the tinned fish into a bowl and mash together with a fork. Add a dash of olive oil, the spices and a pinch of salt and pepper and serve.

### **Bean cakes**

- 500g dried black beans soaked and drained or a tin of cooked beans
- 1½-teaspoons cumin
- 900ml chicken stock
- 4 medium cloves of garlic
- 8g chopped coriander
- 2 tablespoons olive oil

Open a tin of cooked black beans and mash the beans and garlic together and then stir in the coriander and spices. Form the mixture into 8 cakes and refrigerate for an hour. Fry the cakes in olive oil for roughly 5 minutes each side.

### **Fish cakes**

- 250g salmon (or depending on your taste –any fish really)
- 1 beaten egg

- 1 diced onion
- 1 tablespoon wholegrain mustard
- ¼ teaspoon cayenne pepper
- 1 bunch of chopped coriander
- Pinch of salt
- 2-3 tablespoons olive oil
- 200g cooked quinoa

Gently poach the fish until cooked, remove and place in a bowl and break up with a fork. Mix together the egg, onions, quinoa, mustard, cayenne pepper and coriander and season with salt and pepper. Add to the fish and mix well. Form in to 4 cakes and sauté for a few minutes each side in hot olive oil.

### **Lentil pâté**

- 1 onion
- 1 clove of garlic
- 1 tablespoon of olive oil
- 125g lentils
- 600ml chicken stock
- ½ teaspoon each of turmeric, coriander and cumin

Simmer the lentils in the spices and stock until they are cooked. Drain well. Soften the onion and garlic in a frying pan of olive oil. Add the lentil mix and onions into a bowl and mix together with a hand held food processor until they form a paste.

### **Bean paste**

- Tinned beans such as haricot beans or butter beans
- 20g of melted butter
- 1 small bunch of chopped parsley
- 1 clove of crushed garlic
- 2 tablespoons of tomato puree

- Salt and pepper

Drain the beans and mash them up with a fork. Add the garlic, tomato puree, salt and pepper to the melted butter in a small pan. Add the beans and heat the mix up. Mix in the parsley and serve.

Thank you to Jonny Bowden and Erica White for inspiring these recipes; I have adapted them to suit my taste. Please check out the recipes from their books listed below and feel free to adapt them to your tastes.

- Jonny Bowden – Healthiest Meal on Earth. The Surprising Unbiased Truth About What Meals to Eat and Why.
- Erica White – Beat Candida Cook Book.

# Protein

Remember each meal should consist of protein, carbohydrates and healthy fats.

Protein in Greek means “of first importance” so make sure your first choice in a meal is a good quality portion of protein.

# 10 ways to increase protein intake

1. Red meat provides iron, B vitamins and zinc. Balance your red meat with white meat and fish and it is certainly a healthy option. Go for wild, grass fed organic or game meats such as buffalo, rabbit, bison as well as beef and lamb.
2. Chicken and Turkey made into burgers, grilled or stir fried with vegetables for dinner. Aim for organic and free range where possible.
3. Oily fish such as mackerel, trout, sardines, salmon and pilchards. Try them steamed or baked with a side portion of vegetables. Use plenty of herbs to add interest and flavour.
4. White fish such as cod, halibut and plaice are good sources of protein. Make fish cakes, fish pie or simply serve as an alternative fish and chips with roasted carrots, parsnips and onion slices.
5. Eggs - Columbus or Intelligent brand eggs, which are enriched with Omega 3. Boil and carry in your pocket as a quick and easy snack. Poach or scramble with onions, tomatoes and green chillies for a great lunch option.
6. Nuts and Seeds - a handful of walnuts, pistachios, Brazil nuts and almonds make a great snack. Grind a tablespoon of pumpkin, sesame, sunflower and flax seeds and sprinkle on muesli or porridge for a good source of essential fats.

7. Whey protein powder in a shake, be inventive. Mix with fruit, vegetables, quinoa or almond milk and flax seeds.
8. Quinoa boils in ten minutes! Make a quinoa risotto or salad with vegetables and lentils and a tasty dressing. It's rich in essential fats, vitamins and minerals and is a complete amino acid protein source (perfect for vegetarians!).
9. Hummus - buy it ready made or blitz chickpeas with garlic, lemon juice, and tahini. Transport it to work in a mini container.
10. Lentil Dhal is simple to make and has a good balance of protein. Boil the lentils with Indian spices, such as coriander, cumin and turmeric serve it topped with Greek yoghurt. Combine with brown rice, which further increases the protein quality of the meal especially for vegetarians.

# Carbohydrate

Everything from broccoli to a Snickers bars is carbohydrate.

If you get most of your carbohydrates in the form of fruits and vegetables instead of starchy grains, potatoes and sugary foods you will lose weight and feel much healthier.

# 10 Ways to get vegetables in to your diet

1. Roast your vegetables.
  - Roast Mediterranean vegetables – peppers, courgettes, onions and aubergine with garlic and olive oil.
  - Roast sweet potato
  - Carrots, parsnips and turnips
  - Roasted squash
2. Make Coleslaw with any combination of grated red or white cabbage, celery, carrots, broccoli stems and onions with some plain yoghurt, vinegar and lemon juice.
3. Soups – blend any vegetables with some chicken stock to serve as a starter.
  - Spinach with pine nuts
  - Cabbage with cinnamon
  - Winter vegetables
  - Tomato and roasted pepper
4. Sauces - Finely dice vegetables and add to any sauce. Ginger, carrots, garlic, broccoli, tomatoes and peppers all work in Bolognese, chilli and curry sauces.
5. Salads – any leaves combined with tomatoes, beetroot, spring onions, avocado, cucumber and beans make a great salad.

6. Try cauliflower or sweet potato mash for toppings of pies and side dishes instead of potato.
7. Quickly stir-fry some ginger, garlic, beans sprouts, carrots, peppers onions, chillies and broccoli with some tamari sauce for a delicious side dish.
8. Chuck some carrots, celery, spinach or ginger with some fruit or coconut milk to make a smoothie.
9. Eat vegetables crudités such as carrots, peppers, courgettes and celery with hummus or nut butter.
10. Make ratatouille with courgette, aubergine and onions in tomato sauce.

# 10 Ways to increase fruit on a daily basis

1. Try some fruit at breakfast with berries and yoghurt or a sliced apple with your porridge. Raisins or dates in muesli also increase fruit intake, just watch the portion size of dried fruit.
2. Make a smoothie with your favourite fruits. See some of my favourites on pages 18 and 19. Add some whey protein, nut butter or some natural yoghurt and a dash of cinnamon or nutmeg to taste.
3. Frozen mixed raspberries, strawberries, blueberries, blackberries and cranberries are an easy, delicious and healthy way to increase fruit. Serve them with yoghurt as an ice cream substitute.
4. Try apples, tangerine, olives or pears in a salad. Remember cucumbers and tomatoes are fruits too.
5. Jazz up your main meal. Peppers are fruits; add them to a stir-fry or salad.
6. Coconut is a fruit; it's full of healthy fats. Make a Thai curry with coconut milk, add dried coconut slivers to a trail mix or add desiccated coconut to your porridge.
7. Keep some apples and pears in your desk at work for when you feel peckish.
8. Beat the snack attack by keeping some dried fruit to hand, dates, figs, prunes and apricots can be great alternatives for a sweet tooth. However don't eat

them on their own - eat them with some nuts or seeds, and watch the portion size.

9. Have fruit for dessert, stuffed apples, fruit salad, fruit and yoghurt or strawberries and cream.
10. Avocado is a fruit, it's full of fibre vitamin E and essential fats, add it to a salad.

# Don't eat carbohydrates on their own – particularly sugar

- High sugar diets are linked with cancer and sugar feeds cancer cells causing them to grow.
- Sugar suppresses our immune system for several hours.
- Sugar blocks the production of anti-inflammatory substances from omega 3 fats.
- Sugar clogs up arteries and makes blood cells sticky, increasing risk of heart attack or stroke.
- Sugar raises bad cholesterol and triglycerides.
- Sugar makes you fat.
- Sugar disrupts hormones such as insulin.
- Sugar causes leaching of calcium from the bones.
- Sugar robs the body of nutrients.

# 10 tips to eliminate sugar from your diet

1. By law ingredients have to be listed in order of weight so by using 5 different sugars manufacturers can disguise the amount of sugar in a product. Watch out for fructose, high fructose corn syrup, maltose, dextrose, maltodextrin, brown rice syrup, sucrose, glucose, cane juice, fruit juice concentrate, lactose and galactose as they are all types of sugar. Read the label!
2. Manufacturers put sugar in almost any product from bread to yoghurt, tinned foods and quick cook foods. They have even put sugar in cigarettes. Eat 80% of your foods from non-processed whole grain fresh foods that you prepare yourself and you will eliminate a lot of sugar.
3. Beware of low fat foods; they generally replace the fat with extra sugar. Read the label.
4. Use cinnamon and nutmeg on your foods, these naturally sweet spices add flavour and actually help with insulin sensitivity.
5. Switch from table sugar and sweeteners to xylitol, a naturally sweet alcohol sugar. It is much sweeter than sugar but has minimal calories and has minimal effect on blood sugar balance. Add it to drinks and foods to suit your taste.
6. Another natural sweetener is molasses loaded with vitamins and minerals. Use it in cooking and baking to get a sweet taste to your foods.

7. Don't switch from sugar to artificial sweeteners such as nutrisweet as they contain potentially harmful chemicals, stick with xylitol or molasses.
8. No brainer - Don't add salt or sugar to your food, they stimulate your taste buds to get used to salty and sweet foods – both of which were essential through our evolution, but now these foods are abundant in our diet and are generally overeaten.
9. Choose low sugar fruits such as apples, plums, pears and berries instead of high sugar fruits such as bananas, mango, pineapple and raisins. Although these high sugar fruits are not unhealthy they will disrupt blood sugar and potentiality lead to you putting on weight.
10. In our society we eat a lot of grains and potatoes, both cheap and easy to produce. The Food Standards Agency will suggest these are healthy. However we are in the middle of an obesity, diabetes and heart disease epidemic that's probably not from eating too few grains and potatoes. The truth is that grains and potatoes are just a different type of sugar. They are high glycemic load; raise insulin quickly and they cause weight gain. They also offer little in terms of nutrition.

# Healthy fats

## Don't fear eating fats

All fats (except trans fats) in the right balance are healthy.

# 10 steps to increase essential fat intake

1. Eat oily fish such as salmon, trout, mackerel, sardines, pilchards or anchovies at least twice a week.
2. Eat uncooked / unsalted pumpkin, sunflower, sesame, flax and hemp seeds.
3. Eat uncooked / unsalted almonds, cashews, Brazil nuts, walnuts, pecans, pistachios and macadamia nuts.
4. Sprinkle a mix of ground seeds (flax, pumpkin, sunflower, sesame) on your cereal and add extra nuts in to muesli.
5. Reduce cows milk and replace with sheep's or goats milk, as well as nut and quinoa milks. You could also mix half your ordinary milk with half of a milk alternative.
6. Eating wild organic meats is a much better choice than farmed meats. Wild meats have a much better ratio of omega 3 and CLA (another healthy fat).
7. Cook with extra virgin olive oil, walnut oil or coconut oil in place of vegetable oils. Add food at the same time as the oil so the oil doesn't over heat or burn.
8. Eat fresh vegetables such as avocado, green leafy vegetables, spinach, rocket, kale, broccoli and kiwi fruit (the seeds high in omega 3).

9. Use avocado, hummus or seed butter as a base on toast instead of butter or margarine.
  
10. Eliminate trans fats, reduce fried food (e.g. crisps, deep fried foods, pies), processed food (biscuits, confectionary), takeaways and margarine, and replace with good oils from olive oil, fish oil, nuts, seeds, avocado and omega 3 enriched eggs.

As developmental humans we used to consume a diet that had a 1:1 ratio of omega 6 to omega 3 fatty acids.

Now the typical diet has a ratio of about 20:1. When that ratio is not optimal (closer to 1:1) the risk of cancer, heart disease, arthritis, diabetes, and stroke increases.

# 10 steps to re-balance your omega 3 to omega 6 intake

1. Eliminate all foods that contain the words hydrogenated or partially hydrogenated fats. There are no safe levels of these trans fats.
2. Switch from margarine to butter (use sparingly if weight or cholesterol are a problem) and cook with olive oil, coconut oil or nut oils instead of sunflower oil.
3. Eliminate all foods that contain corn, safflower, peanut, or sesame oil.
4. Eat more free-range grass fed meat such as beef or chicken or wild meats such as buffalo, bison or rabbit as they contain more healthy fats such as omega 3 and CLA.
5. Reduce red meat intake and balance this with white meat and oily fish like salmon, trout, mackerel and sardines.
6. Consume at least 6-10 grams of fish oil a day. Our Palaeolithic ancestors consumed 300-400 grams of Omega 3s a week. Make sure they are free of heavy metals and solvents such as hexanes. BioCare or Aliment are two good brands.
7. Eat Omega 3 enriched eggs 2-3 times a week – Columbus or Intelligent are two good brands.
8. Eat green leafy vegetables daily such as spinach, kale, chard, watercress and purslane.

9. Eat any combination of walnuts, pumpkin seeds, sunflower seeds and hemp seeds with other nuts and seeds daily.
  
10. Store flax seeds in the fridge, grind them and add them to your food. Make sure to buy small quantities at a time.

One particular food that has received a lot of attention as being healthful is oily fish.

It is the essential fatty acids EPA and DHA in fish oil that are so important. However, very few of us eat enough fish to meet that demand. One simple way to increase fish oil intake is to take a fish oil supplement.

# 10 reasons to take fish oil

1. A literature search of medical journals demonstrates that omega 3 may play a role in the management of all known diseases. Simply go to the website pubmed (type pubmed into google.co.uk) and type fish oil + “a disease” and see how many published medical papers you can find.
2. The largest body of evidence exists for the role of fish oil consumption in cardiovascular disease. Fish oils have been shown to lower LDL cholesterol, inhibit the formation of arterial plaques, lower serum triglycerides and raise HDL cholesterol.
3. Fish oils lower C-reactive protein, a marker of acute inflammation and a predictive indicator of heart disease.
4. Fish oils reduce blood pressure, prevent irregular heartbeats and can lower heart rate reducing the risk of stroke and heart disease.
5. Fish oils are important constituents in the production of phospholipids that are essential components of cell membranes. This maintains cell membrane fluidity and allows the incorporation of a high number of insulin receptors in the cell membrane improving insulin sensitivity and managing poor blood sugar regulation.
6. Fish oil turns on lipolytic genes. This means more fat will be burned as a fuel.
7. Fish oil turns off lipogenic genes reducing fat stored in the body.

8. EPA in fish oil produces series 3 prostaglandins that help to reduce inflammation; easing joint and muscle pain and acting as an anti-oxidant protecting the heart and brain.
9. DHA in fish oil is important for brain development. Sixty percent of the brain is fat, most of which is DHA. This improves IQ, concentration, reactions and helps protect the eyes.
10. Fish oils maintain cell membrane fluidity and allow the incorporation of a high number of serotonin receptors in the cell membrane improving mood and reducing the severity of depressive disorders.

# Vegan diet

I'm not an advocate of a vegan diet, however, if you are vegan here's how you can balance your blood sugar by getting protein, fats and carbohydrates. Vegans also need to get specific nutrients found mainly in animal foods such as vitamin B12.

# 10 tips for a vegan diet

1. Get protein in the form of tempeh, tofu, nuts, seeds and by combining grains such as quinoa or rice with beans, lentils or legumes.
2. Get good amounts of omega 3 fatty acids, the best plant source is flax seeds and flax oil, followed by hemp seeds and oil, walnuts and purslane.
3. Make sure you get omega 6 fats from foods such as pumpkin seeds, sunflower seeds, hemp seeds, coconut milk and oil and avocado.
4. Eat low glycemic load vegetables for fibre, phytonutrients and a negligible effect on blood sugar. These would include all berries, apples, pears and plums, coconuts, broccoli, cauliflower, cabbage, kale, onions, garlic, salad leaves, tomatoes, cucumber, olives, courgettes and aubergines.
5. Eat a meal or snack every 2-3 hours to keep blood sugar levels steady.
6. Get iron from foods such as nuts, seeds, pulses, dried fruit, sea vegetables, parsley, green leafy vegetables and molasses.
7. Get calcium from foods such as nuts, seeds, pulses, dried figs, sea vegetables, fortified milk alternatives such as quinoa milk or soya milk and molasses.
8. Get B12 from sea vegetables such as dulse, kelp, chlorella, spirulina and nori. Foods fortified with B12 include some milks, some soy products, and some breakfast cereals. Brewer's yeast contains B12.

9. Vitamin D comes mainly from the sun, but food sources are oily fish. If you don't eat oily fish take a vitamin D supplement.
10. Drink plenty of water, at least one and half litres a day.

# Chapter 2

## Digestion and detoxification

The saying goes you are what you eat; well you are what you can digest, absorb and assimilate. Digestion is extremely important. It is popular to blame food intolerances for poor digestion, and this may be the case in some people, however it may be just as likely that there is a bacterial infection, low stomach acid and digestive enzymes or poor gut micro flora that is contributing to poor digestion. Respected nutritionist Geoffrey Bland came up with the axiom of the 4 R's when trying to improve digestion.

R – **Remove** food sensitivities, parasites, fungus and bad bacteria.

R – **Replace** nutrients needed for digestion.

R – **Re inoculate** the bowel with friendly bacteria.

R – **Repair** the gut with important nutrients.

# Remove...

...common food intolerances such as wheat, dairy, soy or eggs if necessary. If you think you are sensitive to a food or several foods, remove them from your diet for 2 weeks. If your symptoms improve you may have a food intolerance, if your symptoms do not improve it could be something else that is affecting your digestion as we will discuss...

# Wheat

Wheat is a type of grass grown all over the world and contains the protein gluten. Gluten is found in wheat, rye, barley, spelt and oats and may contribute to food intolerance. Symptoms may include:

- Indigestion
- Bloating
- Gas
- Stomach pain
- Constipation
- Diarrhoea

Modern man relies too much on grain-based products to get nutrition. I believe we could all reduce the amount of grains we eat, particularly wheat based grains. Also look out for where food manufacturers use wheat and gluten as fillers and bulking agents in food.

# 10 ways to reduce wheat in your diet

1. Locate the 'free from' aisle in your supermarket. Most supermarkets now have their own brands of 'free from' foods. They are usually grouped together in a 'free from' section.
2. Read the labels carefully. Avoid anything that says: wheat, binder, bulgur wheat, couscous, durum, starch, farina, kamut, mustard powder, rusk, semolina and vegetable protein (unless you're sure it is not from wheat). Buckwheat, millet, rye, corn flour, lentils, polenta, potato flour, rice, amaranth and quinoa are wheat and gluten free.
3. Replace your bread with a wheat free alternative. The supermarket's own brands are a good place to start. The Stamp Collection's Sunflower bread and New York Deli breads are tasty alternatives, available in both Sainsbury's and Tesco. Health food shops sell rice, flax and Pumpernickel bread as very nice alternatives. Wheat free breads are usually tastier if you toast them!
4. Eat and Prêt a Manger both do wheat free sandwiches. Eat also sell wheat free bread chunks to go with their soups. Alternatively, make your own sandwiches using wheat or gluten free bread.
5. Switch pasta in your diet. There are lots of wheat free alternatives out there. Pasta made from corn, quinoa, buckwheat and rice are all tasty alternatives.

6. Avoid hidden sources of wheat in stock cubes, gravy or soy sauce. Kallo stock cubes and gravy granules are wheat free. Tamari is a soy sauce made without wheat
7. Snack on oat or rice cakes, toasted seeds, tortillas or popcorn. Nairns do a range of oatcakes in plain, cheese or herb flavours. They are delicious with some hummus. The Food Doctor's range of toasted and flavoured seeds is also nice.
8. Have wheat free muesli or cereals for breakfast. Look out for Pertwood Organic Farm wheat free muesli or make your own using oats, puffed rice, chopped nuts and dried fruit.
9. Make sure your drink is wheat free. Budweiser and Guinness are wheat free, as is champagne and wine.
10. When eating out choose meat, fish, salads and vegetables and avoid pasta, pizza, pies, sausages, sauces and baked goods. Your waiter should be able to help you with wheat free alternatives, or to swap sauces for a wheat free version.

# Wheat free when travelling – on holiday, on the road or on location

1. Chose a self-catering holiday where you can prepare you own food.
2. Read labels on everything you buy to avoid hidden wheat.
3. Find a good local market or shop for fresh produce for when you are self catering.
4. Find a good restaurant by asking around or enquiring if they cater for wheat / gluten free people.
5. Stay away from fast food joints.
6. Don't order anything off a menu if you don't know what it is or you don't understand the language.
7. At breakfast no toast, no breakfast cereals, instead either prepare your own breakfasts or eat foods provided such as fruit and yoghurt, porridge, bacon and eggs (no sausages as most of them have wheat in them as fillers), omelettes, fish and vegetables.
8. At lunch and dinner, if you are eating out – ask the waitress what is in the food, express you are wheat free and they should be able to accommodate you. Choose meat or fish with salads or vegetables; avoid sauces, bread, pasta, pizza, and most desserts, as they will have wheat in them. Grains that you could eat include rice, corn, buckwheat, millet and quinoa. Otherwise prepare your own food along the same lines. Self-catering would be best.

9. Take snack food with you such as nuts, seeds and tinned fish and buy fresh fruit where you can.
10. Drink as normal but avoid most beers, go for a glass of red wine instead.

# Good wheat free food brands

## **Trufree** [www.trufreeco.uk](http://www.trufreeco.uk)

- Spaghetti from Waitrose
- Wheat and gluten free penne pasta from Waitrose
- Pasta shells from Tesco
- Custard creams from Tesco or Waitrose

## **Village Bakery** [www.village-bakery.com](http://www.village-bakery.com)

- Chocolate and orange brownies from Waitrose

## **Stamp Collection** [www.stamp-collection.co.uk](http://www.stamp-collection.co.uk)

- Organic sunflower bread from Waitrose or Sainsbury's
- Organic New York deli bread from Sainsbury's

## **Sainsbury's Free From range** [www.sainsburys.com](http://www.sainsburys.com)

- Free From pita bread
- Free From English muffins

## **Orgran**

- Self raising flour from [www.goodnessdirect.co.uk](http://www.goodnessdirect.co.uk)
- Stone ground buckwheat and rice pasta swirls from [www.goodnessdirect.co.uk](http://www.goodnessdirect.co.uk)

## **Pertwood Organic Farm** [www.pertwood.co.uk](http://www.pertwood.co.uk)

- Organic muesli fruit and seeds from Waitrose or Tesco

**Tesco Free From range** [www.tesco.com](http://www.tesco.com)

- White sliced bread

# Dairy

Dairy is another common food intolerance. Symptoms may include:

- Indigestion
- Mucous production
- Headaches
- Acne
- Gas and bloating
- Stomach pain
- Constipation
- Diarrhoea

Modern man relies too much on dairy based products as well as grain based products to get nutrition. The standard breakfast is cereal with milk. We tend to put milk in all our drinks and we eat a lot of foods that are made from wheat and dairy, such as pasta, yoghurts, cheese sandwiches etc... I believe we could all reduce the amount of dairy we eat particularly those foods with milk, cream, milk solids and milk proteins in them. Look out for where food manufacturers use milk products in food.

*White Lies* published by the Vegetarian and Vegan Foundation suggests dairy consumption is linked to acne, asthma, eczema, gastrointestinal bleeding, arthritis, cancer, constipation, crohn's disease, cardiovascular disease, diabetes, ear infections and food poisoning. Whether or not dairy really does contribute to these conditions, below are tips to reduce dairy in the diet.

# 10 ways to reduce dairy in your diet

1. Locate the 'free from' aisle in your supermarket. Most supermarkets now have their own brands of 'free from' foods. They are usually grouped together in a 'free from' section.
2. Read the labels carefully. Avoid anything that says milk, milk powder, milk protein, milk solids, single cream, double cream or whipped cream.
3. Replace your milk with an alternative. Try a little soymilk, rice milk, oat milk, almond milk or quinoa milk.
4. Instead of using butter to cook with or using it as a spread switch to omega seed butter.
5. Switch the chocolate in your diet. Go from milk to dark chocolate, dark chocolate is full of antioxidants and is heart healthy. The darker the chocolate the better it is, look for a brand that is at least 70% cocoa. Keep the servings small, stick to servings of about 15-30 grams at a time. Green and Black's Organic Chocolate ([Www.greenandblacks.com](http://www.greenandblacks.com)) is a good brand.
6. Avoid hidden sources of dairy in confectionary snacks and instant hot drinks from machines.
7. Snack on hummus, fish, bean or lentil pate on rice cakes or oatcakes instead of yoghurts or cereal bars that contain milk solids.
8. Make sure your drinks are dairy free. Switch from black tea where you add milk to green tea or another

herbal tea. Drink black coffee or switch to a dandelion coffee that is delicious without milk.

9. When eating out choose meat, fish, salads and vegetables, ask the waiter what the foods are made of or if they contain any dairy. Avoid carbonara and creamy curry sauces such as korma.
10. Consider skipping dessert such as ice cream, as most of them will have dairy in them. Go for a fruit salad instead.

## Dairy free when travelling – on holiday, on the road or on location

1. Chose a self-catering holiday where you can prepare your own food.
2. Read labels on everything you buy to avoid hidden dairy.
3. Find a good local market or shop for fresh produce for when you are self catering.
4. Find a good restaurant by asking around or enquiring if they cater for dairy free people.
5. Stay away from fast food joints.
6. Don't order anything off a menu if you don't know what it is or you don't understand the language.
7. At breakfast no milk, cream, cheese or yoghurt. Instead try breakfast cereals with Soya or rice milk, fruit and porridge, bacon and eggs, omelettes, fish and vegetables.
8. At lunch and dinner, if you are eating out ask the waitress what is in the food, express you are dairy free and they should be able to accommodate you. Chose meat or fish with salads or vegetables, avoid sauces, as most of them will have dairy in them. Self-catering would be best.
9. Take you own herbal tea bags and just ask for hot water in a coffee shop or restaurant.

10. Avoid most desserts, as they will have dairy in them. Self-catering would be best.

# Good dairy free food brands

**Sainsbury's Free From range** [www.sainsburys.com](http://www.sainsburys.com)

- Scones
- English muffins
- Naan bread
- Vanilla custard

**Tesco Free From range** [www.tesco.com](http://www.tesco.com)

- Chocolate chip cookies
- White or multi seed rolls
- English muffins
- Crumpets

## **Cereal and Grain Drinks**

- EcoMil Quinoa Drink
- Oatly Oat Drink
- Almond milk

## **Nut Milks**

- EcoMil Almond Drink
- EcoMil Hazelnut Drink

## **Rice Milks**

- Rice Dream Organic Original Rice Milk
- Rice Dream Organic Vanilla Rice Milk

## **Soya Milks**

- Alpro Soya Organic Sweetened/Unsweetened Milk

Most of you will have been educated that you need milk to get calcium for strong bones and teeth.

However

- Watercress has four times the amount of calcium and six times the amount of magnesium than milk.
- Small bony fish such as salmon, sardines and mackerel are good sources of calcium.
- Vegetables such as broccoli, cabbage, parsley and broad beans all contain plenty of calcium.
- Fruits such as prunes provide calcium.
- Nuts and seeds such as almonds, Brazil nuts, cashews, hazelnuts, pecans and walnuts, pumpkin seeds and sunflower seeds provide calcium.

# Parasites, fungus and bacteria

To test for and remove parasites, fungus and bacteria is beyond the scope of this book.

However here is a list of good foods, supplements and herbs that help to kill parasites, bad bacteria and fungus. It is always best to have a stool test done and establish which agents kill the parasites, bad bacteria or fungus you might be infected with, otherwise you may be shooting in the dark.

# 10 foods, supplements and herbs to kill parasites, bad bacteria and fungus

1. If you are not dairy intolerant live yoghurt contains friendly bacteria that can help displace unfriendly bacteria.
2. Sauerkraut and other fermented foods are rich in lactic acid producing bacteria. These types of bacteria are favourable for a well-balanced ecosystem in the bowels.
3. Coconut oil and coconut milk contains capric and lauric acid, which have anti bacterial and antiviral properties.
4. Garlic has been shown to have numerous health benefits including antibacterial and antiviral effects.
5. Ginger has been shown to have anti-inflammatory, antioxidative, antimicrobial and antiviral effects.
6. Castor bean oil has been used for a long time to treat parasite and other bowel infections.
7. Oregano complex has anti parasite, anti fungal and anti bacterial properties.
8. Grape seed extract has anti parasite, anti fungal and anti bacterial properties.
9. Olive leaf extract has anti parasite, anti fungal and anti bacterial properties.

10. Wormwood or berberine can be used to kill parasites and worms.

# Stress

Stress is a major disruption for digestion. Stomach acid secretion is reduced considerably and it draws blood and energy away from the bowels and diverts it to the brain and muscles to either run away or fight. Stress comes in many forms – food intolerances, alcohol, financial stress, relationship stress, mental emotional stress, poor blood sugar regulation etc...

# 10 ways to reduce stress

1. Avoid processed food as the chemicals in them stress the liver and stimulate the release of cortisol – the bodies stress hormone.
2. Avoid stimulants such as caffeine in coffee, sugar, and nicotine as they cause the release of cortisol and disrupt blood sugar.
3. Avoid alcohol and where possible anti-inflammatory drugs as they damage the gut and stresses the liver.
4. Control blood sugar as we have discussed, poor blood sugar control puts you on an insulin and cortisol see saw.
5. Take the time to eat slowly and chew your food. For this it is important that you eat in a relaxed atmosphere.
6. Over or under exercise can elevate the stress hormone cortisol so it is important you do the right type of exercise to relieve stress. If you are quite stressed a walk, some stretching or a short workout might help you.
7. Take the time to breathe. Breathing energises the body and clears the mind. Take five deep breaths each hour, in through the nose and out through the mouth.
8. Quiet time, even if you only get 5 minutes a day lock yourself away in a quiet room and do something you enjoy. Read, stretch or meditate – what ever it takes.

9. It is important to consider what is causing the stress in your life. Can you make any changes to help alleviate the stress? Ask someone for help? Reduce working hours? A life coach may be beneficial to help you assess your life and how you can make beneficial changes.
  
10. Get enough sleep at night, lack of sleep leads us to crave carbohydrates, get ratty and lose concentration. A good nights sleep is a good remedy for most ailments including stress.

If you are continually stressed and not digesting your foods properly you may be overworking the adrenals glands.

The adrenal glands are two small glands that sit on top of the kidney and release stress hormones and other substances that help control fluid balance and blood pressure. Resting and repairing the adrenal glands is a good way to deal with stress.

# 10 ways to rest and repair the adrenal glands

1. Stabilise your blood sugar levels as we have discussed. Preventing blood sugar crashes and the release of cortisol to raise your blood sugar again will rest the adrenals.
2. Exercise the right way. If you are very stressed reduce aerobic to zero as it increases cortisol production and reduce the volume of resistance training. Replace these with parasympathetic exercises including, Tai Chi, Qi Gong, Yoga and simple diaphragmatic breathing exercises to help calm the nervous system down and stimulate rest and repair.
3. Pay off your sleep debt by getting to bed by 10 pm when you can. Sleeping for 9-12 hours when it's dark (depending on which season it is) helps to re-establish normal circadian rhythms of cortisol and melatonin. Also taking naps during the day can be useful.
4. Eliminate energy drainers. This involves identifying people or situations that rob you of energy. Once you have identified these people and situations work toward reducing your exposure to them.
5. Detoxify. This may include having mercury fillings removed, using non-toxic personal products such as deodorant free from aluminium and personal care products free from parabens and eating organic foods.

6. Restore gastrointestinal health. Remove, replace, re-inoculate and repair as we are discussing – especially removing food intolerances.
7. Learn to say **NO** to people. Be in control of your own destiny and learn to turn things and people down without feeling guilty.
8. Cultivate self-fulfilment. Everyone needs to fulfil his or her dreams and have fun. Give yourself time to fulfil these dreams. Spending time with loved ones or in nature can help you move toward good health.
9. Laughter can be a powerful healer. Spending time with those who make you laugh can make you feel better about yourself and aid in your journey to health.
10. Dietary nutrients and supplements that the adrenals require to be healthy include 3-10g of vitamin C, 3 capsules daily of B5 (pantothen) and 600mg of magnesium.

For more on this topic I recommend the excellent book *Tired of Being Tired* by Jesse Hanley from which I have taken my 10 tips.

# Replace...

...nutrients needed for digestion such as stomach acid (hydrochloric acid), digestive enzymes, bile, fibre and water.

# Stomach acid

We need hydrochloric acid (HCL) to properly digest foods. Due to modern stress levels we produce much less HCL than our grandfathers generation. Poor digestion of proteins, fats and carbohydrates can present as:

- Bloating, belching or gas after eating
- Bad breath
- Loss of taste for meat
- Undigested food in stool
- Foul smelling stool

HCL is required for the absorption of vitamin B12, it breaks down all minerals and is essential for their absorption, it tells the pancreas to release other digestive enzymes that further digest food in the intestines and it destroys bacteria and parasites in the stomach.

HCL is made from chloride, vitamin B1 (thiamine), B6 (pyridoxine) and zinc. HCL deficiency signs are:

- Vertical ridges in the finger nails
- Poor nail and hair health
- Indigestion and heart burn

Imagine now that you have good stomach acid levels and that you are digesting all your food properly. The proteins you eat will go to your muscles and immune system to keep you strong and healthy. Vitamins will be absorbed providing antioxidants and co-factors for energy pathways giving you more energy. Your minerals will now be absorbed properly, for example magnesium absorption aids sleep and zinc boosts immunity.

# How to test stomach acid levels

Try this functional medicine test to establish your HCL levels.

## **Preparation**

Purchase a bottle of HCL capsules from your nearest health food store. Poliquin Digest Force of BioCare HCL and Pepsin are ideal. Each capsule should be 200mg of HCL.

## **Step 1.**

Imagine you are eating a steak and vegetables. Eat half the meal; take one capsule of HCL (200 mg). Finish the other half of the meal. Wait 15 minutes and observe the feeling you get in your stomach. If you get a warm sensation in your stomach within 15 minutes, like after drinking a hot cup of tea, stop the test as you have normal stomach acid levels. If you get no warm sensation proceed to step 2. **YOU MUST TAKE THE HCL MID MEAL.**

## **Step 2.**

Take two capsules of HCL (2 x 200 mg) in the middle of your next meal. Wait 15 minutes and observe the feeling you get in your stomach. If you get no warm sensation proceed to step 3.

## **Step 3.**

Take three capsules of HCL (3 x 200 mg) in the middle of your next meal. Wait 15 minutes and observe the feeling you get in your stomach. If you get no warm sensation proceed to step 4.

## **Step 4.**

Take four capsules of HCL (4 x 200 mg) in the middle of your next meal. Wait 15 minutes and observe the feeling

you get in your stomach. If you get no warm sensation proceed to step 5.

### **Step 5.**

Take five capsules of HCL (5 x 200 mg) in the middle of your next meal. Wait 15 minutes and observe the feeling you get in your stomach. If you get no warm sensation proceed to step 6.

### **Step 6.**

Take six capsules of HCL (6 x 200 mg) in the middle of your next meal. Wait 15 minutes and observe the feeling you get in your stomach. If you get no warm sensation proceed to step 7.

### **Step 7.**

Take seven capsules of HCL (7 x 200 mg) in the middle of your next meal. Wait 15 minutes and observe the feeling you get in your stomach. If you get no warm sensation stop the test. **DO NOT EXCEED SEVEN CAPSULES** (seven meals).

## **Interpreting the results**

If you got a warm sensation in your stomach within 15 minutes of taking one 200mg capsule of HCL you passed the test and don't need to take HCL.

If you got a warm sensation after taking between two and seven you are HCL deficient and the dose you need to take at each meal is the dose you passed the test at minus 1 capsule. For example if after five meals (taking 5 x 200mg capsules) you got the warm sensation you need to take 4 x 200mg capsules with every meal until 4 capsules gives you a warm sensation. You would then continue to decrease the dose by 200mg each time you

get a warm sensation until your stomach acid levels are back to normal.

If you got no warm sensation after taking seven capsules you produce very little stomach acid. Therefore you will need to take two 650mg capsules of HCL with every meal until you feel a warm sensation with this dose. Poliquin Ultra HCL 4.0 or Metagenics Metagest are ideal.

After this take one 650mg capsule and two 200mg capsules until you get a warm sensation. Continue to decrease the dose by 200mg each time you get a warm sensation with the dose you are currently taking until you don't need to take HCL anymore. Smaller meals might require less and larger meals might require more HCL.

Some people naturally produce low stomach acid due to genetic reasons or due to being very stressed and may need to maintain a small dose of HCL indefinitely.

# Digestive enzymes

Digestive enzymes such as lipase, sucrase, protease and amylase are not found in a great deal of foods. However pineapples and papaya contain digestive enzymes and may be worth consuming as an entrée if you suffer poor digestion. Otherwise take a good digestive enzyme supplement.

# Bile

Bile is a substance released from the liver into the gall bladder, the gall bladder then excretes it into the small intestine where it emulsifies fat, aids the absorption of fat-soluble vitamins, helps calcium absorption, converts beta-carotene to vitamin A, stimulates peristalsis, and aids cholesterol, processed hormone, drug and toxins excretion by binding it up with dietary fibre.

# 10 foods and nutrients stimulate bile production

1. Eggs contain choline, which stimulates bile flow.
2. Lecithin also contains choline.
3. Artichokes can increase bile production two fold in thirty minutes after eating it.
4. Bitter salad leaves like rocket, endive and chicory stimulate bile flow.
5. Freshly squeezed lemon and hot water first thing in the morning stimulates the liver and bile production.
6. Coffee is a bitter herb that stimulates bile production.
7. Lipotropic nutrients such as cysteine, methionine and B vitamins stimulate the gall bladder to produce bile.
8. Ginger root may stimulate bile flow.
9. Eating foods rich in vitamin C helps to stimulate bile production. Foods such as plums, broccoli, tomatoes and cabbage may help.
10. Dandelion coffee, tea and green tea stimulate bile production.

# Fibre

We do not get enough fibre in our diets. We need to get between 30 and 50 grams of fibre a day.

Fibre binds up toxins and “old hormones” and eliminates them through the faeces. Increased fibre intake is associated with improved bowel health and helps with controlling diabetes and heart disease.

Fibre comes in different forms:

<b>Starch</b>	<b>Long chains of glucose - amylose and amylopectin</b> Seeds and underground tubers, potatoes, sweet potato, beans, pulses and oats.
<b>Oligosaccharides</b>	<b>Indigestible chains of fructose</b> fructooligosaccharides (short chains) and inulin (long chains): Leeks, onions, bananas, chicory root, Jerusalem artichoke, legumes and pulses
<b>Insoluble fibre</b>	<b>Cellulose:</b> The main constituent of plant cells, long chains of glucose Wheat bran, dried apricots, oats, peas, almonds, beans, prunes, sunflower seeds, lentil, carrots, broccoli, cabbage, cauliflower, apples and bananas.

<b>Soluble fibre</b>	<b>Hemicellulose:</b> long chains of xylose in plant cell walls <b>Gums and mucilages:</b> legumes, oats, nuts and seeds <b>Pectins:</b> apples, pears and citrus fruit <b>Algal polysaccharides:</b> sea vegetables
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# 10 ways to boost your fibre intake

1. Have vegetables with every evening meal. They are fibre heavyweights.
2. Pick whole grain foods over refined carbohydrates every time, switch from white to brown – rice, pasta and breads.
3. Begin your day with a fibre boost. Choose wholegrain breakfast cereals such as porridge, muesli or opt for whole grain toast, or eat a handful of fibre-rich berries with yoghurt.
4. Have high-fibre snacks such as oatcakes, rice cakes or vegetable crudités with nut butter or hummus.
5. Eat a handful of unsalted raw nuts or seeds with dried figs or apricots.
6. Add fresh fruit to every meal, a dessert may include banana or strawberries and cream.
7. Have a fruit and berry Smoothie with whey protein.
8. Beans and legumes including mung beans, chickpeas and lentils are fibre heavy weights with between 11-17g of fibre per serving. Incorporate them into salads, soups and casseroles, or puree them to make a delicious dip.
9. Add ground flax seeds to your smoothie, yoghurt or soups to increase fibre and omega 3 fatty acids.
10. A tablespoon of psillium husks in 200ml of water in the morning can provide extra fibre.

# Water

I don't need to give you 10 tips on how to increase water intake. Simply drink more plain water. Why? Because the body uses about seven litres of water a day for digestion alone.

Plus as little as 2% dehydration causes:

- 8% loss of speed
- 10% loss of strength
- 20% loss of cognitive function

Generally aim to drink 2-3 litres of water a day. Your osmocheck score (a device used to measure hydration) should be below 400 or your urine should be clear. If you take a multivitamin your urine will be bright yellow no matter if you are dehydrated or not. During exercise you retain fluid better if you drink sports drinks rather than plain water. Avoid red bull, shark and alcohol as they dehydrate you.

Coffee and tea in moderation are healthy, if you consume 2-3 litres of plain water a day.

## Re-inoculate...

...the bowel with good bacteria, and foods and nutrients that support the growth of good bacteria. Friendly bacteria are very important for the immune system and have been shown to help reduce symptoms of irritable bowel syndrome.

It is imperative that you re-inoculate the bowel with good bacteria after taking antibiotics. Research is now showing that lactobacillus administered with or after antibiotics is useful for reducing antibiotic associated diarrhoea. It may also play a protective role in bacterial infections such as chlostridium difficile.

# 10 tips to support good bacteria in the gut

1. Take a high strength probiotics supplement with food. It should contain at least 20 billion viable organisms. It should be a multi strain probiotic containing lactobacillus and bifidobacteria. Good brands include BioCare, Aliment, Nutri and Higher Nature.
2. There is generally no need to take a probiotic supplement indefinitely unless you do things that disrupt good bowel bacteria such as drink excess alcohol and eat excess sugar. Use probiotics therapeutically or cycle 2 weeks on, 2 weeks off for a few months before relying on food sources of pre and probiotics.
3. Fermented foods such as pickles, sauerkraut and vinegar contain lactic acid forming bacteria that are suitable for the intestines.
4. Eat live yoghurt; make sure they are full fat, as low fat versions contain too much sugar. Sugar feeds bad bacteria and fungus.
5. The popular probiotic drinks advertised on television generally contain too much sugar and too little healthy bacteria to make a difference.
6. Friendly bacteria feed off of fructooligosaccharides. Eat leeks, onions, bananas, chicory root, Jerusalem artichoke, legumes and pulses. These are known as prebiotics.

7. A fructooligosaccharides (FOS) supplement is a good alternative to sugar. It is sweet tasting and gut friendly.
8. If you have to take antibiotics for an infection it is a good idea to buy a one to two weeks supply of probiotics to take at the same time. If you take the antibiotics in the morning, take the probiotics in the evening.
9. Reduce the amount of stimulants and drugs you have to take, alcohol damages the gut and liver, kills good bacteria and can make you fat. Certain drugs such as non-steroidal anti-inflammatory drugs also damage the gut.
10. Reduce sugar in the diet. Sugar feeds bad bacteria and fungus making a bad bowel situation worse. See page 36 for 10 tips to reduce sugar.

# Repair...

...the gut lining, reduce inflammation and help the gut heal to prevent food intolerances and autoimmune disorders.

One theory is that undigested proteins pass through the gut wall in to the bloodstream more easily than through a non-damaged gut wall. These proteins such as the proteins found in wheat, dairy, eggs and nuts are attacked by the immune system causing food intolerances and sensitivities. The immune system can become sensitise and faulty and begin attacking its own proteins such as the protein in joint tissue, nerves tissue or organ tissue possibly contributing to conditions such as rheumatoid arthritis, multiple sclerosis and diabetes.

# 10 nutrients, foods and tips to repair the gut wall

1. First you have to have removed any offending foods, bacterial or fungal infections. Trying to heal the gut while there are irritants present will be like papering over the cracks.
2. First thing in the morning take 1 full dropper of non-alcohol extract of liquorice root (take care with this if you have high blood pressure) or use a deglycyrised liquorice supplement.
3. Take a multivitamin and mineral to provide nutrients needed for healing, cell growth and repair such as vitamin A, zinc and B vitamins.
4. For two weeks take 2 to 3 tablespoons of cod liver oil per day. This provides additional vitamin A and vitamin D needed for gut health. Cod liver oil also contains anti-inflammatory omega 3 fatty acids.
5. After the initial two weeks drop the dose to 3-5 teaspoons per day and switch to fish oil.
6. Continue taking HCL and digestive enzymes during this stage so that your food is being properly digested.
7. The small intestine uses glutamine as a fuel. Take a small dose of glutamine powder every few hours in some water away from eating food. Charles Poliquin recommends 80g spread throughout the day.
8. The large intestine uses butyric acid as a fuel and by eating butter you can provide your body with this

nutrient. It is the proteins from a food that people have an immune reaction to, as butter is the fat from milk, you should be ok even if you are dairy intolerant.

9. Aloe Vera can be very soothing and calming for the gut, consider adding it to your glutamine drinks.
10. A supplement with gamma oryzanol, N acetyl glucosamine or gamma linolenic acid (GLA) also stimulates gut cell repair.

# The Liver

The liver and bowel work closely to clean and detoxify your body. Once the gut is healed, the liver needs to be supported to do its job thoroughly.

# Overview of the liver function

The liver is the largest internal organ in the human body and it is often the most overworked. It weighs approximately 1.4kg and filters about 1.5 litres of blood every minute. The liver has five primary roles in maintaining health:

- Digestion
- Blood filtration
- Detoxification
- Cholesterol synthesis
- Metabolism

# 10 ways to improve liver function

1. Alcohol is your liver's enemy so give your liver a total break by stopping drinking. Instead have your drinks with tonic water or drink red grape juice in a wine glass.
2. There are no safe levels of trans fats so don't eat fried or burnt foods, processed meat, processed foods containing hydrogenated or partially hydrogenated oils, commercial mayonnaise and all margarines and spreads.
3. Phase 1 detoxification in the liver requires a host of vitamins and minerals such as copper, magnesium, zinc, selenium, vitamin C and B vitamins. Eat citrus fruits, green leafy vegetables, seeds, nuts, fruit and vegetables.
4. Phase 2 detoxification requires mainly the building blocks of proteins called amino acids. These will come from non-processed meats, fish, eggs, nuts and seeds.
5. Cruciferous vegetables comprising broccoli, Brussels sprouts, cabbage, cauliflower, kale, turnip, kohlrabi are very good for stimulating detoxification in the liver.
6. Allium vegetables such as all types of onions, shallots, leeks and garlic are very good for stimulating detoxification in the liver.
7. Asparagus, brassicas and whey protein are rich in glutathione, the body's most abundant antioxidant. It is believed that 60% of the detoxification in the liver is carried out with glutathione.

8. Glucuronic acid is another important detox nutrient for the liver. Glucuronic acid comes from apples, broccoli and grapefruit.
9. Methylation is a way the liver cleans itself. Adequate methylation depends on having adequate B vitamins in the diet. Unprocessed meat, fish, vegetables, nuts and seeds provide B vitamins. For those with a genetic polymorphism in the MTHFR gene, you will need to take a methylator supplement with methylated folic acid (L-5MTFH) as well as B12, B2, B6, TMG and zinc.
10. Drink plenty of water as the body can require vast amounts to aid digestion and elimination of toxins through urine and faeces.

# Liver supplements

There are various herbs and supplements that help the liver to detoxify:

1. Milk thistle – rich in silymarin, which may help relive some cases of liver disease.
2. Dandelion root – good bitter herb for the liver.
3. Sulphurophane – a molecule found in broccoli.
4. DIM – two molecules of indoles found in cruciferous vegetables.
5. Whey protein, rich in glutathione.
6. N acetyl cysteine a precursor to glutathione.
7. Calcium d glucarate, which helps to draw out xenoestrogens.
8. B vitamins including B12, B6 and folic acid to aid liver methylation.
9. Multivitamin and mineral for a broad-spectrum of nutrients.
10. MSM – a form of sulphur that is useful to the liver.

# Part 2

# Chapter 3

## Nutrition for a condition

Now you are eating every few hours and you are eating a well balanced diet with protein, fats and carbohydrate at every meal and snack to balance blood sugar. You have removed any offending foods from your diet, rebalanced your gut flora, healed your gut and supported your liver. This will have done wonders to help you lose weight and get healthy.

In part 2 of this book there are a number of tips for specific health conditions that can help you take that extra step to achieving your health goals.

# Epidemiology

A study from the Harvard School of Public Health has demonstrated how diet, lifestyle and metabolic risk factors for chronic disease contribute to deaths in the USA. Although these are statistics from the USA they will correlate to how diet, lifestyle and metabolic risk factors for chronic disease contribute to deaths in the UK.

The numbers of preventable and premature deaths each year in the USA are due to the following causes:

- Smoking caused 467,000 premature deaths
- High blood pressure caused 395,000 premature deaths
- Overweight-obesity caused 216,000 premature deaths
- Inadequate physical activity caused 191,000 premature deaths
- High blood sugar caused 190,000 premature deaths
- High LDL cholesterol caused 113,000 premature deaths
- High dietary salt caused 102,000 premature deaths
- Low dietary omega-3 fatty acids caused 84,000 premature deaths
- High dietary trans fatty acids caused 82,000 premature deaths
- Alcohol use caused 64,000 premature deaths

(NB alcohol prevented 26,000 deaths from heart disease, stroke and diabetes, because moderate drinking reduces risk of these diseases. But this was outweighed by 90,000 alcohol-related deaths from traffic and other injuries, violence, cancers and a range of other diseases. Net premature deaths 26,000).

- Low intake of fruits and vegetables caused 58,000 premature deaths

- Low dietary poly-unsaturated fatty acids caused 15,000 premature deaths

What is interesting about this study is the number of premature deaths caused by high blood sugar (i.e. poor blood sugar control), low omega 3 fat consumption, low fruit and vegetable consumption and high consumption of trans fats. By simply acting on the advice in the blood sugar chapter of this book and by balancing your fat intake and increasing your fruit and vegetable intake you can significantly reduce your risk of premature death and improve your health.

# Women's Health

The Nurses Health Study carried out by Harvard Medical school is a study that followed over 150,000 nurses over the last 30 years looking at their diet and what diseases they suffered from. There are a number of surprising findings that have been established from this research.

- As BMI increased the risk of heart disease, high blood pressure, gallstones and type 2 diabetes all steadily increased even among those in the “healthy” BMI category.
- Total fat in the diet was not linked to heart disease it was about the type of fat consumed.
- Women who ate the highest amount of trans fats were 50% more likely to die of heart disease, whereas women with the lowest consumption of trans fats and higher consumption of polyunsaturated fats (omega 3 and 6 fats) had a 70% reduction in heart disease.
- High fat diets did not increase the risk of cancer.
- Increased dietary calcium intake among post-menopausal women was not protective against hip and wrist fractures.
- A diet rich in red meat increased the risk of colon cancer.
- A multivitamin and mineral that contains folic acid reduced the risk of colon cancer by 75%.
- Women who drank 1-3 glasses of alcohol a week cut their risk of heart disease, but increased their risk of cancer.

Most importantly The Nurses Health Study established that adopting five simple behaviours could reduce the risk of heart disease by 83% in women. These five behaviours were:

1. Maintaining a healthy weight
2. Eating a Mediterranean type diet high in fish and omega 3's
3. Taking daily exercise
4. Not smoking
5. Drinking alcohol in moderation

# Men's Health

The Health Professionals Follow-Up Study that began in 1986 was an all male study designed to complement the all female Nurses' Health Study. It aimed to evaluate the impact of nutrition and lifestyle factors on men's health. Over 51,000 men were involved in this study, being surveyed every two years on topics like smoking, physical activity, and medications taken and how they relate to serious illnesses such as cancer, heart disease, and other vascular diseases.

Here are some of the results:

- Moderate alcohol consumption reduced the risk of heart attack.
- Weight gain and obesity were linked to higher risk of kidney stones.
- Coffee consumption cut the risk of diabetes.
- Low-carb diets were more effective for weight loss than low-fat diets.
- Men could reduce the risk of stroke by eating fish.
- Specific types of exercise could significantly reduce the risk of heart disease.
- Eating fish reduced the risk of sudden death.
- Western dietary patterns were linked with a greater risk for type 2 diabetes.
- Green vegetables and fruits rich in vitamin C reduced the risk of heart disease.
- Caffeine was linked to protection from Parkinson's disease.

Perhaps some of these results are not surprising but, as with the results from the Nurses Health Study by simply eating fish, fresh fruit and vegetables, reducing high glycemic load carbohydrates, consuming moderate amount of alcohol and coffee as well as exercising can

reduce the risk of disease and lead to a happier and healthier lifestyle.

# Weight loss

The nation is getting fatter, just look around you. How many overweight people are you surrounded by? Being overweight increases your risk of heart attack, cancer and diabetes. I don't know about you, but I want to reduce my risk of getting these diseases. Losing weight will be a big step toward reducing your risk.

# 10 tips for weight management

1. If you take any medications check the side effect slip that comes with them. Many medications cause you to put on weight. By simply reducing or finding alternatives to your medication you can lose weight. Always work with your GP on this.
2. Eliminate wheat. This is a common food intolerance that can cause inflammation, water retention and bloating that makes you look fat.
3. Eliminate dairy. This is another common food intolerance that can cause inflammation, water retention and bloating that makes you look fat.
4. De-stress. Stress causes the release of cortisol that the accumulation of fat around the midsection.
5. Exercise daily. Exercise burns calories, builds muscle and increases your metabolism. For every kilo of muscle you add to your body you burn an extra 100 calories at rest.
6. Never go on a calorie controlled diet. This affects your metabolism and puts you in to a state of starvation. When you come off the diet your will store fat and energy in case your body thinks it will starve again in the future.
7. Stabilise blood sugar. Poorly controlled blood sugar leaves you with cravings and energy slumps. The reaction to this is usually to binge eat.
8. Eat organic food. These are less contaminated with toxins. Your body stores toxins in fat. The more toxic

you are, the more fat you need to keep the toxins out of your circulation.

9. Eat less sugary foods. Sugary foods increase insulin; insulin is the fat storage hormone. Reduce insulin by eating fruits and vegetables and staying away from grains and bakery products.
10. Don't be scared of eating healthy fats, they won't make you fat, they will actually make you lose fat by improving insulin sensitivity and controlling chemicals in the brain that control appetite.

# 10 fat burning foods

1. Hot peppers contain nutrients that help increase metabolism.
2. Tea of any colour, especially green tea has been shown to increase fat loss.
3. Tahini – sesame seed lignans enhance fat burning by increasing liver enzymes that breakdown fats.
4. Fish oils (oily fish or a fish oil supplement) stimulate fat burning genes and increase metabolism.
5. Cranwater (1 part no added sugar cranberry juice with 8 parts water) stimulates the liver to burn fat. This is a staple of the Fat Flush Plan by Anne Louise Gittleman.
6. Eggs are rich in choline a nutrient essential for bile production that helps emulsify and burn fats.
7. 200mg of caffeine from a strong cup of coffee favours free fatty acids metabolism and spares glycogen.
8. Carnitine helps transport fatty acids into the cells' mitochondria for energy burning. Carnitine is found in meat and fish. Alternatively an L carnitine supplement may be useful.
9. Eating half a grapefruit a day has been shown to help people lose fat and improve insulin sensitivity.
10. Conjugated linoleic acid (CLA) found in grass fed meats or in a CLA supplement has been shown to help burn tummy fat. 3g a day if taken alone or 6g

a day if combined with arginine or glutamine is effective.

# Another reason to eat protein and fat

When proteins and fats pass into the small intestine cholecystokinin (CCK) gets released in to the blood that tells the brain you have eaten enough. But carbohydrate does not signal the small intestine to release CCK. Only when carbohydrate gets in to the blood and it raises insulin does the brain register you are full. You tend to over eat carbohydrate before your brain knows you are full. Remember insulin is the fat storage hormone and too much carbohydrate increases insulin causing carbohydrates to be stored as fat. Therefore eat more protein and fat to help raise CCK after a meal and reduce carbohydrates to control insulin.

Insulin also raises serotonin that makes you feel happy and satisfied. However, serotonin levels can drop off quickly leading to carbohydrate cravings. Thus you are much more likely to overeat carbohydrate to get that “food high”.

Another hormone called leptin is important in weight control. Leptin rises as you eat and also tells the brain you are full. Leptin can be extremely high in obese people leading to leptin resistance, a condition much like insulin resistance where lots of leptin is in the blood but your brain don't respond to it any more. Therefore you don't feel full and you carry on over eating. Finally increased leptin causes increased insulin production and can exacerbate insulin resistance.

# Another reason to lose weight

Fat cells act as an endocrine organ...

- They release PAI-1 that promotes angiogenesis, atherosclerosis and thrombosis (new blood vessel growth seen in cancers, thinning arteries and blood clots).
- They release adiponectin that is associated with insulin resistance and obesity.
- They release adiponectin that increases the uptake of fatty acid, increases triglyceride synthesis and transports glucose into fat cells turning it to fat.
- They release renin and angiotensin, both of which increase vascular tone and increase blood pressure.
- They release inflammatory cytokines TNF alpha, IL-6 and resistin that promote inflammation.
- They release molecules that control hunger such as leptin.
- They convert testosterone to oestrogen. This is not good if you are a man, one of the side effects is you start asking your girlfriend if your butt looks big in your jeans.

# Cardiovascular health

Heart attacks and cardiovascular disease are one of the biggest killers in the western world.

The Lyon Diet Heart Study tested the effectiveness of the Mediterranean diet in people that had suffered a heart attack. After 4 years those who followed the Mediterranean diet had between 50-70% decreased risk of recurrent heart attack, angina, stroke and death even though cholesterol levels did not change.

Another study introduced the concept of the “poly meal”. Seven foods are known to reduce cardiovascular disease; if these foods were consumed together on a daily basis in a “poly meal” they could reduce heart disease by 75%. Read on...

# 10 tips to improve cardiovascular health

1. The concept of the poly meal, make the following foods the cornerstones of your main meals as they have been clinically proven to reduce heart disease if consumed regularly:

- Fish
- Garlic
- Vegetables
- Nuts
- Fruit
- Red wine
- Dark chocolate

2. Eat a moderate to low carbohydrate diet focusing on low glycemic load carbohydrates. This will help lower VLDL, LDL, triglycerides and blood pressure. High sugar intake is associated with high triglycerides in certain populations.

3. Eat fish and fish oils. These healthy oils improve all cardiovascular markers such as lowering (bad) LDL cholesterol, triglycerides, blood pressure and CRP and raising (good) HDL cholesterol. It also helps prevent irregular heartbeats and thins the blood.

4. Reduce sodium-containing foods. Read food labels for salt and sodium content. 6g a day is the maximum amount allowed, less is better. Anything that is processed will have salt in it. Don't add salt to food if you eat processed foods. If you eat a lot of non-processed foods don't use table salt, use Celtic sea salt.

5. Increase potassium containing foods, all fruit and vegetables contain potassium.
6. Eat more magnesium in the form of green leafy vegetables, nuts and seeds. Magnesium helps blood vessels to relax and widen reducing blood pressure and regulates the heartbeat.
7. Drink a little alcohol each day, especially red wine. The antioxidant resveratrol in red wine is good for the heart and studies such as The Nurses Health Study and the Health Professional Follow Up study have shown those who consume a moderate amount of alcohol have better cardiovascular health.
8. Eat nuts, seeds and oats for beta sitosterols. These plant sterols are shown to reduce bad LDL cholesterol and increase good HDL cholesterol.
9. Homocysteine levels have been linked to heart disease. Lower homocysteine with foods rich in B vitamins, including meats, fish, and vegetables.
10. Supplements for heart health include coQ10, magnesium, taurine, omega 3, plant sterols, vitamin C, B6, B12, folic acid and niacin.

# 10 tips to lower blood pressure

1. Eat the DASH diet. This is essentially a diet low in sodium, lower in carbohydrate and higher in protein and essential fats. It is also higher in vegetables and lower in grains, fruit and dairy. Example:
  - Meat, poultry and oily fish 2-4 servings a day
  - Vegetables 6-8 servings a day
  - Fruits 2 servings a day
  - Dried beans, seeds and nuts 1-2 servings a day
  - Low fat dairy products 0-2 servings a day
  - Cereals, grains and pasta 0-2 servings a day
  - Fats and oils 4-5 servings a day (mainly unsaturated fats like olive oil, fish oil, however some saturated fat is allowable)
  - 50g of fibre a day (mix of soluble and insoluble)
2. Reduce sodium-containing foods – read food labels for salt and sodium content. 6g a day is the maximum amount allowed, less is better. Anything that is processed will have salt in it. Don't add salt to food if you eat processed foods. If you eat a lot of non-processed foods don't use table salt, use Celtic sea salt.
3. Foods rich in potassium, magnesium and vitamin C help relax and strengthen blood vessels. Eat fruit, green leafy vegetables, nuts and seeds.
4. Control blood sugar levels. Not eating regularly causes you to release adrenalin a powerful vasoconstrictor. Also reduce stress as stress causes the release of adrenalin too.

5. Lose weight – remember fat cells release chemicals that increase blood pressure. Weight loss is proven to reduce blood pressure and can be achieved by exercising and eating well.
6. Eat fish, fish oils and garlic. These improve all cardiovascular markers including blood pressure.
7. Natural diuretics are useful – these include dandelion tea and coffee, green tea, all melons, asparagus, celery, watercress and cucumber. 4 sticks of celery a day has been clinically proven to reduce blood pressure.
8. Natural ACE inhibitors include hydrolysed whey protein and pomegranate juice. Resveratrol in red wine also helps blood vessel walls relax and widen, don't over do the units though.
9. Exercising 3 times a week for 30 minutes is a great start to reduce blood pressure. Use a mixture of resistance and cardiovascular exercise.
10. Supplements to improve blood pressure include 700-1500mg of taurine, 50-300mg CoQ10, 50mg B6 and 300-600mg of magnesium per day.

# Salt

Modern salt is a very refined product far from its original form. As developmental human's salt was scarce, however now you can find salt in all processed foods to make it taste better. We need salt, however 6g is the daily limit for adults. Salt is essential for the adrenal glands, for making HCL in the stomach and for muscle and nerve cell function.

# 10 things you need to know about salt

1. Read labels on the food you buy to see how much salt you are getting. You will be surprised how easy it is to eat more than 6g a day.
2. White salt is processed sodium chloride that you should avoid.
3. Real salt should have a colour be it pink, red, beige or grey. This means it contains trace minerals and has not been highly processed.
4. A great brand is Celtic Sea Salt. It contains 82% sodium chloride and 14% other trace minerals, a large portion of it being magnesium.
5. Good salt should not be cheap, but it should not be extremely expensive. A kilo of Celtic Sea Salt is roughly £12.
6. Solo salt is another good brand. It is lower in sodium chloride and higher in potassium.
7. The more protein you eat, the more salt you will need. Olympic strength coach Charles Poliquin has found that on every comprehensive metabolic profile he does sodium is low in high protein users.
8. Salt intake needs to be individualised. Reducing salt in people with high blood pressure would be sensible, but people who exercise and sweat a lot or who are trying to heal their adrenal glands need more salt.

9. In certain people salt can make osteoporosis worse. Do you have a family history of osteoporosis?
  
10. Don't eat processed foods and you will avoid a lot of salt. This includes anything out of a packet, a tin, a jar or in a restaurant. Don't add salt to your food at the dinner table, add it whilst you are cooking to season your food.

# Sleep disorders

Sleeping disorders are fast becoming a major problem for the British population. One in twenty of us suffer from excessive daytime drowsiness, one in 50 British adults are on prescribed medicine to help with sleep, and there are probably as many people self-prescribing over-the-counter remedies.

The reason we are tired is because we have a sleep debt. Think of your sleep debt as a bank overdraft; if you have a big overdraft you simply have to make monthly payments to meet the minimum requirements, plus pay off the interest, to pay off the debt. Similarly if you have a sleep debt you have to begin paying it off (getting adequate sleep) plus the interest (catch up on what you have missed).

Before the advent of the light bulb, it is safe to say that people got enough sleep. If you have ever been on holiday to a relatively poor country you would have seen this first hand as people rise (wake) and set (sleep) with the sun. Even the advent of fire thousands of years ago would not have produced enough light to interrupt our sleep rhythms and was probably used at night more for warmth and protection.

Our bodies are designed to be in a rhythm with the sun. As the sun rises in the morning, cortisol – an awakening hormone begins to rise. This cortisol rhythm peaks at around midday and begins to drop off in the afternoon. As the sun begins to set, the production of melatonin – a sleep hormone – begins to rise, making us sleepy. During the first few hours of sleep there is an increased production of growth and repair hormones, such as DHEA, testosterone and growth hormone. This fine balance in the hormonal system is what keeps our body in rhythm;

however, modern lifestyles upset this finely tuned hormonal rhythm.

# 10 tips to improve sleep

1. Reduce caffeine consumption; it takes longer than you think for your liver to detoxify caffeine especially if you have the slow metabolising enzymes. Don't drink caffeine (coffee, tea, cola) after 4pm.
2. Don't use your bedroom as an office, remove the computer, television etc... and use the bedroom only for sleeping (unless you get lucky).
3. Eat more magnesium in the form of green leafy vegetables, nuts and seeds. Magnesium is a relaxing mineral and aids sleep.
4. Reduce stress – adrenalin and cortisol are awakening stress hormones increasing sympathetic nervous system activity, heart rate, breathing and blood pressure.
5. Turn down the lights when it starts to get dark or use candles to prepare yourself to go to sleep.
6. Take a hot bath before bed; add a couple of tablespoons of Epsom salts to the water to aid relaxation and sleep.
7. Not all alcohol will not help you sleep so watch what / how much you drink in the evenings.
8. Control blood sugar throughout the day by eating low glycemic load foods, eating protein at every meal and eating every 3 hours or so.
9. Supplements that improve sleep include 2-7g of inositol, 300-600mg of magnesium in divided doses

in the hours leading up to going to bed, 500-1000mg of tryptophan or 50-100mg of 5HTP.

10. Herbs that help sleep include valerian root and lemon balm.

# Boost energy

Whenever I do a nutrition consultation one of the first things that my clients comment on is that they have improved energy. In fact one of the most common complaints is that they have low energy to begin with.

# 10 ways to boost energy

1. Eat plenty of foods with B vitamins: eggs, broccoli, asparagus, mushrooms, watercress, cabbage, peas, beans, sesame seeds, pumpkin seeds and sunflower seeds.
2. Eat foods with Magnesium: green leafy vegetables, beans, almonds, cashews, lentils, potato, oatmeal, seeds and pumpkin seeds.
3. Eat foods that contain vitamin C: peppers, watercress, cabbage, broccoli, strawberry, lemons, kiwi fruit, Brussels sprouts, papayas, peas, melon, oranges, grapefruit, limes, tomatoes and cauliflower.
4. Eat foods that contain copper, sulphur and iron: copper – green vegetables, liver and fish; sulphur – eggs, onions and garlic; iron – meat and lamb's liver, sardines and chicken.
5. Eat foods containing CoQ10: sardines, mackerel, pork, spinach, peanuts, sesame seeds and walnuts.
6. Get quality sleep: you rest and recover from your day with a good nights sleep. Aim for 8 hours between 10pm and 6 am.
7. Drink plenty of water: aim for between 1.5 and 2 litres a day.
8. Eat 25g of quality protein with each meal: fresh fish, lean meat, lentils, beans, pulses and legumes combined with whole grain brown rice or quinoa.
9. Eat low Glycemic load carbohydrates such as apples, pears, plums and berries, plus all green vegetables.

Avoid process carbohydrates such as bread, pasta, biscuits and sugar.

10. Get plenty of essential fatty acids: salmon, sardines, mackerel, tuna, herring, hemp seeds, walnuts, pumpkin seeds, omega 3 enriched eggs and flax seeds.

# Immune disorders

There are diseases where the immune system attacks itself and its own body known as autoimmune disorders. Examples include rheumatoid arthritis, lupus, multiple sclerosis and Grave's disease. These diseases have multiple aetiologies however supporting and normalising immune function may help the symptoms.

# 10 ways to boost the immune system

1. Choose the healthiest foods you can. Choose preferably organic, locally grown whole foods, such as fruits, vegetables, whole grains, beans, seeds, nuts, fish, berries, and dark green leafy vegetables. The immune system is supported through foods with high nutritional content.
2. Eat plenty of fresh fruit and vegetables at least 5-7 portions a day. These foods are high in antioxidants that boost our immune system. Some examples are watercress, broccoli, carrots, spinach, sweet potato, pumpkin, cantaloupes, sprouts, squash, onions, garlic, apples, strawberries, pears, plums, berries, and citrus fruits.
3. Eat adequate amounts of good quality protein. The immune system requires proteins to function. Glutamine and immunoglobulins found in whey protein are particularly important.
4. Drink plenty of pure water. Buy a Brita water filter and aim to drink 1.5 to 2 litres of water per day. This helps flush the body of toxins and keeps you well hydrated.
5. Regular exercise is another method for boosting the immune system. Over exercise causes the immune system to be lowered however, twenty to thirty minutes of heart-pumping exercise, 4 to 5 times per week will keep you on top of your game.
6. Eat foods high in friendly bacteria or that feed friendly bacteria like onions, leeks, asparagus, live yoghurt

and berries. These friendly bacteria help strengthen the immune system.

7. Reduce alcohol and stimulants such as sugar and caffeine, these weaken the immune system and they use up valuable nutrient to be detoxified. Increase your water consumption when drinking alcohol and coffee. Remember sugar actually depresses the immune system for up to four hours after its consumption.
8. Reduce exposure to pollutants such as cigarette smoke, burned foods and traffic pollution. These make the immune system work unnecessarily harder therefore lowering its efficiency.
9. Get plenty of sleep and rest; we require at least 8 to 10 hours per night. Your body uses this time to repair itself.
10. Get exposure to sunlight as often as you can to help produce vitamin D in the skin, there are some respected health experts who claim there are no cases of auto immune disorders in populations with adequate vitamin D, for example there are more cases of MS at high latitudes where the sun is weaker and people synthesise less vitamin D. Alternatively take a vitamin d supplement.

# Allergies

Asthma, eczema and seasonal allergies are also symptoms of immune system sensitivity. However they are not as serious as some of the autoimmune disorders mentioned previously.

# 10 tips for asthma and seasonal allergy

1. Quercetin found in apples, onions, grapes, berries, tea and red wine has been associated with lower incidence of asthma.
2. Low stomach acid levels have been found in 1 out of 5 non-asthmatic children, whereas low stomach acid levels have been found in 4 out of 5 asthmatic children. Take the HCL test on page 77.
3. Low HCL can lead to food allergies. In fact food allergy may be a contributing factor of at least 75% of asthma in children and 40% of asthma in adults. Top of the list is dairy intolerance, followed by wheat, gluten, corn, soy, tartrazine, chocolate, eggs, fish and citrus fruits
4. Bacteria and yeast infections from poor gastrointestinal (GI) health and overuse of antibiotics is linked with asthma. Balance GI bacteria with probiotics and fermented foods such as sauerkraut.
5. Stress management is one of the best natural cures for asthma.
6. Studies have reported that low levels of selenium are found in people with asthma. Selenium is important for the antioxidant glutathione peroxidase (GST), an important part of the immune system. GST also becomes depleted detoxifying asthma drugs.
7. Magnesium deficiency is frequently found in asthmatics. Magnesium is a relaxing mineral leading to bronchodilation.

8. B6 deficiency is frequently found in asthmatics. B6 and magnesium supplementation together can help reduce the incidence of asthma.
9. Antioxidants such as vitamin C and vitamin E are important for the immune system and may help people with asthma.
10. Immunoglobulins combined with Perilla oil (Immune supreme and Perilla Px from Poliquin PICP) and fish oil helps to switch off the asthma genes and dampens the TH1 and TH2 immune system response. It also and works well for hay fever and allergies.

# 10 ways to improve the symptoms of eczema

1. Many people with eczema test positive on a skin test to certain foods. The most common food allergy / intolerance is to dairy. Other suspects could include wheat, soy, nuts, eggs and chocolate. Think about finding alternatives to dairy and reducing or eliminating the other foods from your diet to see if your skin improves.
2. Poor digestion and low HCL are another contributing factor to food intolerances causing eczema. Undigested proteins create food antigens in the bowel that are absorbed into the blood. These food antigens are then attacked by the immune system creating inflammation and food sensitivity.
3. Food additives, preservatives and artificial dyes such as tartrazine, benzoates and sulphur dioxide may contribute to any of the allergic reaction such as asthma, eczema or hay fever. Avoid processed foods.
4. Skin inflammation may be caused by imbalances of dietary fatty acid intake. Reduce the consumption of red meat, butter and dairy. These foods are rich in arachidonic acid that converts to inflammatory substances in the body.
5. Increase the intake of fish, fish oils and flax seeds as they contain omega 3 fatty acids that convert to anti-inflammatory substances in the body.
6. People with eczema are deficient in zinc. Zinc is needed to power an enzyme that produces the

stomach acid HCL, and another enzyme that synthesises anti-inflammatory substances from omega 3 fatty acids in the body. Consume more zinc containing foods or consider supplementing with 10-20mg of zinc a day.

7. Vitamin A is critical for the proper development and maintenance of healthy skin. A symptom of vitamin A deficiency is a condition where there is thickening of the skin known as hyperkeratinisation. Vitamin A is found in animal foods such as eggs and butter. Beta-carotene from sweet potato, tomatoes and peppers is able to convert to vitamin A in the body.
8. People who suffer eczema have a higher susceptibility to have bacterial overgrowth on the skin. Bacteria infections can stem from the bowel due to an imbalance of good to bad bacteria. Adding fibre, and pre and probiotics to the diet can help rebalance the bacteria in the bowel.
9. Boost the immune system with fruit and vegetables to get the antioxidants vitamin A, C, E zinc and selenium.
10. Consider supplementing GLA, fish oil and a multivitamin to provide extra zinc and vitamin A.

# Female health

Female health problems include PMS, PCOS, endometriosis, fibroids, osteoporosis, symptoms of the menopause and infertility. The aetiology of these health problems are multi layered and often complicated, however there are some common underlying causes to all of them including hormonal imbalances, stress, poor nutrition and lack of nutrients, environmental oestrogens and poor detoxification.

Dr Marilyn Glenville PhD is extremely knowledgeable in the area of women's health. The following section is influenced by her work and her books including The Nutritional Health Handbook for Women are excellent.

# PMS

The symptoms PMS are varied and affect up to 90% of all women. The cause is still unknown. Different hypotheses as to the cause of PMS include hormone imbalance, a lack of essential fatty acids, a lack of B vitamins, magnesium, chromium and zinc and poor blood sugar control. PMS has been classified into four categories described below. Unfortunately many women may not fit neatly into each category and may have a mixture of these symptoms.

1. PMS-A (anxiety) includes mood swings, irritability, tension and fits of rage. This is the most common type affecting 40-60% of women. This may be due to poor liver function, gallstones and poor gut health. Anxiety can be caused by low serotonin levels therefore more protein; specifically tryptophan is required (5HTP would be a good supplement). Supporting the liver and the clearance of oestrogens may also help.
2. PMS-C (cravings) including sugar cravings, headaches and fatigue. This may be due to magnesium deficiency, pancreas insufficiency or inflammation. Dark chocolate and green leafy vegetables help increase magnesium. Eating small regular meals, high in protein and healthy fats and using fenugreek, R alpha lipoic acid, B3, fish oil, cinnamon, zinc, B6 and chromium can support the pancreas and reduce inflammation.
3. PMS-D (depression) includes depression, confusion and poor coordination. This may be due to low levels of the neurotransmitters serotonin and dopamine due to a lack of protein in the diet. It may also be due to an imbalance of fatty acids. Taking evening primrose

oil that contains GLA and taking fish oil can help correct this.

4. PMS-H (hyperhydration) includes water retention, breast tenderness and enlargement, abdominal bloating, and weight gain. This may be due to poor mineral balance and increased aldosterone that causes the tubules of the kidneys to retain sodium and water. These women need to use Celtic Sea Salt and alkaline minerals such as potassium and magnesium orotate. Diuretics such as raspberry leaf tea , green tea and taurine may help. Doubling the intake of a multivitamin and mineral for 5 days before the period starts may also be useful.

Many of the symptoms of PMS are also symptoms of poor blood sugar control and this may be the major contributing factor. Simply follow the blood sugar control advice in this book. Magnesium, B6 and evening primrose oil supplements may be very useful to manage PMS.

# 10 ways to balance mood and improve depression

1. Stabilise blood sugar. Yes I know it's a recurring theme, but it is that important.
2. Increase foods that make dopamine. These include cottage cheese, chicken, duck, eggs, pork, oats, turkey, walnuts and yoghurt.
3. Increase foods that make acetylcholine. These include eggs, lecithin, meat, liver, almonds, cabbage, salmon, macadamia nuts, broccoli and avocado.
4. Increase foods that make serotonin. These include chicken, turkey, eggs, duck and cottage cheese.
5. The micronutrients B1, B3, B6, B12, folic acid, vitamin C, zinc, magnesium, calcium and manganese are required to turn these foods into neurotransmitters.
6. Omega 3 fats make cell membrane more fluid and allow serotonin receptors to be put in to cell membranes so more serotonin can bind to a cell and have its positive effect.
7. Increased exposure to free radicals can damage brain tissue, therefore increase antioxidant foods containing vitamin A, C and E as well as zinc and selenium and decrease fried and burnt food.
8. Faulty methylation increases homocysteine – a toxic amino acid that has been linked with poor mood and depression. Eat foods with plenty of B vitamins to reduce the build up of homocysteine.

9. Food intolerances as previously discussed can affect brain cells much like they can affect gut cells. This sets up brain allergies and mood disorders.
  
10. Vitamin D status is being linked to many immune and neurological disorders. Vitamin D deficiency may play a role in mood disorders and depression so eat plenty of oily fish and get exposure to sunlight. Also consider a vitamin D3 supplement.

# 10 ways to ease water retention and bloating

1. Sip on green tea throughout the day. The mild caffeine has a diuretic effect, the theanine is great for your mood, and the antioxidants can help reduce inflammation and slow down the aging process.
2. Or sip on raspberry leaf tea another mild diuretic.
3. Dandelion tea or coffee is also diuretic and a great liver herb to improve detoxification.
4. Have 1-2 servings of melon (honeydew, cantaloupe, canary, Tuscan...) per day. These fruits are natural diuretics.
5. Eat vegetables that are specifically known for their diuretic effects such as asparagus, celery, watercress and cucumber.
6. Get in a sauna for 30 minutes a day, and be sure you are re-hydrating with plenty of pure spring water afterwards. A far infrared sauna is particularly good.
7. Reduce sodium containing foods as sodium causes water retention and increases blood pressure. Sodium is found mainly in processed foods from tins, jars, packets as well as ready-made meals, fast food, biscuits and crisps. Read labels, the RDA for salt is 6g per day.
8. Increase potassium containing foods as these counteract sodium and help reduce blood pressure and water retention. Potassium is found in all fruit and vegetables.

9. Exercise, any type of exercise is good for you – walking, running, spinning, swimming, yoga, Pilates or weights are just a few types.
10. Taurine (1000-2000 mg), B6 (50-100 mg) and a multi nutrient all help with fluid balance.

# 10 tips for headaches and migraines

1. Control blood sugar levels. Not eating regularly causes you to release adrenalin a powerful vasoconstrictor.
2. Stress also causes adrenalin release and vasoconstriction of blood vessels in the brain can lead to raised intra cranial pressure and pain.
3. Foods rich in magnesium and vitamin C help relax and strengthen blood vessels and improve blood flow to the brain. Eat fruit, green leafy vegetables, nuts and seeds.
4. Avoid trigger foods, these could be anything. Common foods include chocolate, alcohol, caffeine, sugar, processed meats, certain spices and anything fermented (cheese, soy, sauerkraut). A food intolerance test may be indicated.
5. Foods containing tyrosine can be converted to tyramines by bowel bacteria. Tyramines may trigger migraines. Foods rich in tyrosine include chicken, turkey, cottage cheese and fish.
6. Clean up the bowel, bad bacteria in the bowel convert tyrosine to tyramines. Follow the 4 R's in the digestion and detoxification section of this book to prevent the production of tyamines.
7. Reducing the consumption of meats and increasing the consumption of fish can help balance platelet aggregation factors associated with migraines.

8. Avoid artificial sweeteners, especially aspartame. It is a source of phenylalanine that can convert to tyrosine and tyramines. It is also neuro toxic.
9. Support liver health. The liver detoxifies all things that we consume. The liver needs amino acids, B vitamins, zinc, copper, selenium and magnesium to clean itself and our body. Any build up of toxins can have negative effects such as headaches.
10. Supplements that have been shown to help migraines include: CoQ10 (100mg/d) – 50% reduction in migraines, magnesium (200-600mg/d) – 50% of sufferers have low Mg, B2 (400mg/d) – can decrease migraines 25% and 5-HTP.

# 10 ways to manage PCOS

1. Balance blood sugar levels and reduce sugar in the diet. Sugar causes the release of insulin, in women with PCOS high insulin levels tell the ovaries to produce testosterone that leads to male hair growth patterns, such as facial hair, hair on the chest, tummy and groin.
2. Simply losing weight has been shown to improve the symptoms of PCOS in women. Eat to lose weight, such as eating a low carb diet rich in proteins and essential fats.
3. Start doing some weight training to put a little bit of muscle on. Muscle is metabolic tissue and helps to burn stored fats and improve insulin sensitivity.
4. Support the liver pathways, as the liver has to detox sex hormones such as testosterone. Amino acids, B vitamins and minerals support the liver.
5. Increase fibre in the diet to bind toxins and processed hormones from the liver for elimination in the stool.
6. Eat foods rich in pre and probiotics. Probiotics activate phytoestrogens and inhibit enzymes in the gut that recycle “old” hormones that have been bound to dietary fibre for elimination. This reduces the likelihood of the hormones being re-absorbed and having a hormonal effect.
7. Eat plenty of fish, nuts and seeds to balance the types of fats in the diet. Omega 3 fatty acids can reduce pain and inflammation associated with PCOS, improve insulin sensitivity and turn on fat burning genes.

8. Increase the consumption of phytoestrogen such as some traditional soy products such as edamame, natto, tempeh, miso as well as lentils, chickpeas, beans, garlic, celery, fennel, oats, alfalfa, mung beans, sage, parsley and ground flax seeds to increase sex hormone binding globulin (SHBG). SHBG helps to mop up excess testosterone that is in the blood from high insulin.
  
9. Decrease exposure to xenoestrogens (see page 157).
  
10. Herbs and supplements that help insulin sensitivity include B vitamins, zinc, magnesium, chromium, fenugreek and cinnamon; consider taking a multivitamin and mineral and using fenugreek and cinnamon in your food. In fact cinnamon is very useful for lowering blood sugar levels and improving insulin sensitivity. Jonny Bowden in his book *The 150 Healthiest Foods on Earth* has a great recipe for cinnamon tea. Put 3 rounded tablespoons of ground cinnamon and ½ to 1 teaspoon of baking soda (less if sodium is a problem for you) in a 1 litre jar. Fill the jar with boiling water and let it steep at room temperature until it's cooled. Strain or decant the liquid, discard the grounds, put a lid on the jar, and stick it in the fridge. Drink one 250ml cup of the tea four times per day.

# 10 ways to manage endometriosis and fibroids

Endometriosis and fibroids are conditions caused by excess oestrogen (endogenous or environmental) compared to progesterone in the body otherwise known as “oestrogen dominance”. Oestrogen is cleared in the liver by 3 detox pathways.

1. Ensure adequate B6, B12 and folic acid is in the diet to provide the vitamins for methylation, a process where methyl groups are transferred from one molecule to another thus turning a harmful oestrogen in to a safe less active oestrogen. Consider taking a methylator supplement.
2. Sulphur from onions, leeks, garlic and cruciferous vegetables powers the sulphation pathway to detoxify oestrogen.
3. Glucuronic acid from grapefruit, apples and broccoli powers the glucuronidation pathway. Also consider the supplement calcium d glucarate.
4. Lose weight as fat cells contain an enzyme called aromatase. Aromatase turns testosterone in to oestrogen. Even women should have some testosterone in their bodies however you do not want it all turning to oestrogen. Zinc, green tea extract, grape seed extract and resveratrol from red wine inhibit aromatase.
5. Increase the consumption of phytoestrogen. These weak plant oestrogens bind to oestrogen receptors on cells preventing stronger endogenous oestrogens or powerful xenoestrogens from binding. This

reduces the effect of oestrogen in the body such as telling fibroids or endometriosis to grow.

6. Decrease exposure to xenoestrogens as they have a powerful oestrogenic effect in the body. See xenoestrogens page 157.
7. Caffeine has been linked to endometriosis and fibroids so reducing coffee and tea may help.
8. Foods that decrease pain and inflammation associated with endometriosis and fibroids include oily fish, ginger, garlic, olives, hops, onions, berries, broccoli, grapes and red wine.
9. Supplements called DIM and sulphurophane are very good oestrogen detoxifiers. Alternate taking DIM with sulphurophane. Too much oestrogen can damage the DNA in the cells. Certain nutrients have been shown to be useful in protecting and repairing damaged DNA. These nutrients include green tea extract, limonene from citrus fruits, lycopene from tomatoes and curcumin from the spice turmeric.
10. Add extra fibre and probiotics to the diet to bind the processed oestrogens and prevent gut enzymes recycling them for re-absorption.

# 10 ways to manage Osteoporosis

1. Risk factors for osteoporosis are believed to be smoking, premature menopause, a lack of exercise, long-term use of certain medication such as steroids, irregular menstrual cycles and being overweight. Therefore stopping smoking, reducing medications - particularly steroid based medications - and losing weight should reduce risk factors for osteoporosis.
2. High protein diets have been linked with increased risk of osteoporosis. This is attributed to proteins being acidic which then needs to be buffered by calcium taken from the bones thus decreasing bone mineral density. However, the key is to alkalise the body by consuming lots of fruits and vegetables. Below is a table of foods that are acid or alkaline. Aim to have a net alkaline diet. Remember grains are acidic so have small servings of meat, fish and grains with lots of fruits and vegetables.

<b>Acid</b>	<b>Alkaline</b>
Cheese, mayonnaise and eggs. Fish and shellfish. Bacon, beef, chicken, liver and lamb. Brazil nuts and walnuts. Rye, oats, wheat and rice. Plums, cranberries and olives.	Almonds and coconuts. Milk. Beans and lentils. Avocado, cabbage, spinach, celery, lettuce, mushrooms, onions, root vegetables and tomatoes. Fruit.

3. Exercise is particularly important for bone mineral density. Doing load-bearing exercises for the spine, hips and wrists are important such as running and weight training.

4. Certain foods have been shown to be beneficial for bone health. Onions increase calcium in bones and inhibit cells that break bone down (osteoclasts); cauliflower, broccoli, peas, watercress, spinach, raspberries and natto are rich in vitamin K which activates a compound called osteocalcin that helps anchor calcium inside the bones. Apples are rich in boron; boron has very important bone building qualities.
5. Dairy is not the only source of calcium. If you are dairy sensitive you can still get plenty of calcium from other foods. Watercress has four times the amount of calcium and six times the amount of magnesium than milk. Salmon, sardines, broccoli, cabbage, almonds, parsley, prunes, pumpkin seeds and broad beans all contain plenty of calcium.
6. As important as calcium for bone mineral density is magnesium. Magnesium deficiency causes decreased bone strength and volume, poor bone development, and dysfunctions in bone turnover and remodelling. Almonds, cashews, Brazil nuts, hazelnuts, pecans, walnuts, brown rice, parsley, pumpkin seeds, sunflower seeds, broccoli, cauliflower, spinach, kale, carrots, lentils, potato and oatmeal are all good sources of magnesium.
7. Vitamin D status is another extremely important factor in the development of osteoporosis. Vitamin D is critical for calcium to be absorbed in the gut. If you are getting lots of calcium without adequate vitamin D you will not absorb it. Take a D3 supplement.
8. Higher levels of homocysteine have been linked with bone loss and osteoporosis. B vitamins, such as B2,

B6, B12 and folic acid are important for reducing homocysteine.

9. Reduce caffeine, sugar, alcohol and salt as they all have been shown to decrease bone mineral density, which can potentially lead to osteoporosis.
  
10. Fizzy soft drinks such as certain well-known brands of soda contain large quantities of the mineral phosphorus to give the drink its fizz. When you consume one of these drinks blood levels of phosphorus increase, however the body needs to buffer this phosphorus with calcium and calcium will be drawn out of the bones and deposited in to the blood. Therefore reduce or eliminate drinking these soda pops to preserve your bone health.

# Infertility

It takes at least three to four months for eggs and sperm cells to mature so there is a four-month period in which you can take steps to ensure that all the necessary factors for a healthy conception and pregnancy are present.

The causes of infertility or miscarriage include:

- Fibroids
- Genetic and chromosomal abnormalities
- Being over weight
- Hormonal imbalances
- Auto-immune disorders
- Abnormal or low sperm count
- Smoking
- Alcohol
- Caffeine
- Radiation

# 10 ways to improve fertility and prevent miscarriage

1. Eliminate any parasites and correct any bowel pathology as 60 to 70% of the immune system is located around the gastrointestinal tract. Any pathogens or inflammatory mediators in the bowels create an overactive or sensitised immune system. This may contribute to increased NK (immune) cells that are seen in some cases of miscarriage. A comprehensive digestive stool analysis will be able to establish if there are any bowel problems that need to be addressed.
2. Correct hormone dysfunction. Any imbalance in hormone levels, particularly oestrogen and progesterone, will affect the ability to maintain a pregnancy. Your doctor should be able to test this; however research is demonstrating that females with a higher distribution of fat on the buttocks and thighs may be oestrogen dominant.
3. Lose weight. Women with PCOS are at more risk of miscarriage. Men who are overweight may have poor quality sperm.
4. Improve sperm quality. Men should have healthy testosterone levels and get plenty of zinc and vitamin C in the diet. Men should also avoid the chemical paraben found in many personal products as they decrease testosterone; lower sperm count and shrink the testicles.
5. Improve the health of the thyroid and adrenals; these glands play an important role in regulating body function from metabolism to the immune system. Eat

fish, onions and asparagus for iodine, and poultry, fish, almonds, pumpkin seeds and sesame seeds for tyrosine. These nutrients are essential to make thyroid hormones. Foods containing selenium, zinc, vitamin A, vitamin D, vitamin E and vitamin B6 also help the conversion of T4 to the active form T3. Employ the tips described on page 73 to help the adrenals.

6. Increase nutrient intake. A growing foetus needs a host of nutrients such as zinc, calcium, carnitine and omega 3 fatty acids. If the mother is depleted of these nutrients there may be a higher risk of miscarriage.
7. Cut out alcohol. Consumption of alcohol has been linked with miscarriage. Alcohol lowers testosterone in males and also reduces a male's sperm count.
8. Stop smoking. Smoking has been linked with miscarriage. Chemicals in the smoke damage DNA in sperm cells and possibly also in a foetus and may lead to chromosomal disorders.
9. Cut out coffee. Consumption of coffee and caffeine has been linked with miscarriage. Just 3 cups a day of coffee increases risk of miscarriage.
10. Reduce exposure to electro-magnetic radiation. This type of pollution comes from mobile phones, television or computers and may affect the developing cells of a foetus causing DNA and chromosomal abnormalities. This may lead to miscarriage.

# 10 ways to improve symptoms of the menopause

1. Control blood sugar as set out in the start of the book, this will help to manage mood swings, headaches and energy lows. Also avoid caffeine and sugar.
2. Eat plenty of omega 3 fats found in fish, nuts and seeds to help control inflammation that may be associated with some of the symptoms of the menopause.
3. Eat beans, fruits and vegetables for fibre to bind “old” oestrogen and eliminate them in the stool.
4. Support the adrenal glands. At the menopause the ovaries stop producing oestrodiol; instead oesterone from the adrenal glands becomes the predominant form of oestrogen. Therefore healthy adrenals are paramount. Reduce stress, control blood sugar and eat foods rich in vitamin C and B vitamins.
5. Increase phytoestrogens as they help lower follicle stimulating hormone (FSH) that becomes high during the menopause. They also increase sex hormone binding globulin (SHBG) and provide a source of oestrogen that is low in menopause.
6. Decrease exposure to xenoestrogens, these foreign oestrogens bind to cell receptors causing an oestrogenic effect in the body that may contribute to things such as hot flushes, night sweats and vaginal dryness.

7. Support the liver and digestion. This is how the body detoxifies itself of foreign oestrogens and “old” processed hormones.
8. Supplements that help during the menopause include vitamin A, C and E that decrease hot flushes and vaginal dryness, B vitamins help support the adrenals and calcium and magnesium support the bones and can help decrease anxiety and irritability.
9. There are various herbs that are helpful for ladies going through the menopause, agnus castus helps relieve hot flushes, black cohosh and dong qui relieves hot flushes and vaginal dryness and milk thistle is good for the liver.
10. Exercise helps with managing weight, it releases endorphins that make you feel happy and energetic and it helps to maintain bone mineral density.

# Xenoestrogens

Xenoestrogens are powerful oestrogen like compounds from pesticides, plastics and personal care products have been linked to various health problems. Xenoestrogens bind to oestrogen receptors on cells and mimic the action of your body's own oestrogen. This can lead to oestrogen dominance and various health conditions such as:

- Endometriosis
- Fibroids
- Polycystic ovaries
- Premature puberty
- Obesity
- Breast cancer

# 10 ways to minimise exposure to xenoestrogens

1. There are nearly 400 different chemicals licensed for spraying on UK crops, often times in combination. We really don't know what the cocktail effect of these chemicals do to our health. Therefore buy as much organic produce as you can afford. Xenoestrogens are stored in fat, so it's important to buy organic meats, fats and oils and trim away excess fat from meats (remember though that organic fats are essential and healthy).
2. Minimise the amount of food you buy and store in plastic wrappers, xenoestrogens from plastic leach in to your food.
3. Avoid heating food in plastic and certainly not in a microwave oven. Instead store food in parchment paper, glass jars and cook with stainless steel.
4. Increase fibre intake from fruit, vegetables, beans and peas. These help bind "old" oestrogens in the bowel and eliminate them in the stool.
5. Eat plenty of cruciferous vegetables – broccoli, cabbage, kale, Brussels sprouts, chard, and kohlrabi. These help the liver process oestrogens.
6. Eat phytoestrogens such as some traditional soy products – tempeh, miso and natto and chickpeas, lentils, mung beans, flax seeds, alfalfa sprouts, parsley, fennel and sage. These weak plant oestrogens can block oestrogen-binding sites on cells preventing the powerful xenoestrogens from

binding, thus reducing the oestrogenic effect in your body.

7. Eat pre and probiotic foods and use the supplement calcium d glucurate. These nutrients inhibit enzymes in the gut that can recycle “old” oestrogens from fibre in the bowel. This reduces the likelihood of the oestrogen being re-absorbed in to your system.
8. Use non-chloride bleached 100% cotton tampons and sanitary towel to reduce exposure to dioxins, which are carcinogenic.
9. Read the labels on your personal care products (deodorant, toothpaste, shampoo, creams and moisturisers). Avoid anything that contains parabens. These are oestrogenic compounds that have been found in breast cancer tumours in females and have been shown to reduce testicle size, sperm count and testosterone in rats. We really don't know what they do in humans yet. Use natural roll on deodorants instead of spray on antiperspirants. Also use organic natural creams, moisturisers and make up, as the body will absorb harmful chemicals put on the skin. Neways or J/A/S/O/N are two good non-toxic brands.
10. Use natural household cleaning products to reduce exposure to xenoestrogens and other chemicals. Ecover or Neways are good non-toxic brands.

# Which organic foods to buy

The Environmental Working Group found that the following 12 fruits and vegetables were the most contaminated with pesticide residues:

- Peaches
- Apples
- Sweet bell peppers
- Celery
- Nectarines
- Strawberries
- Cherries
- Pears
- Grapes
- Spinach
- Lettuce
- Potatoes

I would also recommend you buy organic coffee, milk, poultry and other meats as well.

They also found that the following 12 foods were the least contaminated with pesticides:

- Onions
- Avocados
- Sweet corn
- Pineapples
- Mango
- Asparagus
- Peas
- Kiwi fruit
- Bananas
- Cabbage

- Broccoli
- Papaya

Of the clean foods onions, avocado and sweet corn had almost no detectable levels of pesticides and are safe to buy non-organic.

# Part 4

# Chapter 4

## Food tables

The following pages suggest where you can find the vitamins, mineral, antioxidants, essential fats, semi-essential nutrients and fibre I talk about in this book. These are not extensive lists but they will give you a good indication of what to eat if you need more fibre or essential fats or specific vitamins.

<b>Fat soluble vitamins</b>	<b>Source</b>
<p>Retinol <b>(A)</b></p> <p>Beta-carotene</p>	<p>Butter, milk, calf's liver, eggs, oily fish. Humans also make retinol from beta-carotene. High doses are toxic.</p> <p>Carrots, watercress, cabbage, squash, sweet potatoes, dried apricot, broccoli, squash, mangoes, tomatoes, broccoli and cabbage.</p>
<p>Cholecalciferol <b>(D3)</b></p>	<p>Milk, butter, cheese, eggs, liver, salmon, pilchards, sardines, mackerel and cod liver oil.</p> <p><b>SUNLIGHT MOST IMPORTANT</b></p>
<p>Alpha-tocopherol <b>(E)</b></p>	<p>Brown rice, avocado, almonds, hazelnuts, peanuts, pistachio nuts, sunflower seeds, butter, salmon, sardines, tuna, sweet potato, sesame seeds, lentils, peas, beans, walnuts, pecans and cashews nuts.</p>
<p>Phylloquinone <b>(K)</b></p>	<p>Liver, cauliflower, Brussels sprouts, lettuce, cabbage, kale, leeks, spinach, beans, broccoli, peas, watercress, asparagus, potatoes, tomatoes, milk and cheese.</p> <p>Also made by friendly bacteria in the gut.</p>

<b>Water soluble vitamins</b>	<b>Source</b>
<b>Thiamine (B1)</b>	Eggs, lamb, liver, sardines, asparagus, mushrooms, peas, beans, watercress, lettuce, cabbage, peppers, cauliflower and tomatoes.
<b>Riboflavin (B2)</b>	Liver, milk, cheese, mackerel, eggs, broccoli, wheat germ, asparagus, mushrooms, watercress, cabbage, bean sprouts and broccoli.
<b>Niacin / Nicotinic acid (B3)</b>	Tuna, chicken, liver, lamb, whole wheat, courgettes, asparagus, fish, mushrooms, salmon, cabbage, mackerel, turkey, tomatoes, cauliflower and brown rice.
<b>Pantothenic acid (B5)</b>	Mushrooms, watercress, broccoli, lentils, cabbage, strawberry, peanut butter, eggs, lentils, avocado, alfalfa, peas and tomatoes.
<b>Pyridoxine (B6)</b>	Liver, kidney beans, watercress, peppers, banana, squash, broccoli, asparagus, lentils, cauliflower, Brussels sprouts, onions and brown rice.
<b>Cyanocobalamin (B12)</b>	Oysters, sardines, tuna, lamb, beef, liver, eggs, fermented foods, shrimp, cottage cheese, milk, turkey, chicken, cheese, mackerel and salmon.

<p>Folic acid <b>(B9)</b></p>	<p>Lamb's liver, beetroot, broccoli, cauliflower, artichoke, asparagus, spinach, sprouts, sesame seeds, hazelnuts, cashews, walnuts, cauliflower and oranges.</p>
<p>Biotin</p>	<p>Almonds, cauliflower, corn, oysters, eggs, lettuce, peas, tomatoes and cabbage.</p>
<p>Ascorbic acid <b>(C)</b></p>	<p>Peppers, watercress, cabbage, broccoli, strawberry, lemons, kiwi fruit, Brussels sprouts, papayas, peas, melon, oranges, grapefruit, limes, tomatoes, cauliflower and kale.</p>

<b>Minerals</b>	<b>Source</b>
Calcium	Milk and dairy products (high in Ca but not Mg), salmon, sardines, pulses, nuts, broccoli, cabbage, root vegetables, almonds, parsley, prunes, pumpkin seeds and broad beans.
Magnesium	Green leafy vegetables, beans, almonds, cashews, lentils, potato, oatmeal, pumpkin seeds, almonds, raspberries, kiwi, grapes, dates, coconut, watercress, spinach and leeks.
Sodium	Processed food. Celtic Sea Salt.
Potassium	All fruit and vegetables. Lentils, kidney beans, chickpeas, banana, avocado, watercress, cabbage, celery, parsley, radishes, cauliflower, mushrooms, pumpkin, milk and carrots.
Phosphorus	Present in all foods Olives, sauerkraut, shrimp, celery, cabbage, watercress.
Chloride	Celtic Sea Salt.
Molybdenum	Tomatoes, wheat germ, pork, lamb, lentils, beans

Trace minerals	Source
Iron	Meat, lamb's liver, sardines, chicken, peas, spinach, lentils, pumpkin seeds, almonds, cashews, brazil nuts, walnuts, sesame seeds and pecans.
Zinc	Meat, lambs liver, oysters, pulses, pecans, almonds, quinoa, pumpkin seeds and sardines.
Copper	Quinoa, cashews, sesame seeds, pumpkin seeds, eggs, chicken, green vegetables, liver and fish
Selenium	Tuna, oysters, mushrooms, herring, cottage cheese, cabbage, beef liver, cod, chicken, Brazil nuts, sesame seeds and brown rice.
Iodine	Seafood and kelp
Chromium	Whole grains, legumes, nuts and seeds, mushrooms, asparagus, green peppers, eggs, chicken, apples, butter, parsnips, lamb, Swiss cheese and potatoes.
Manganese	Tropical fruits, nuts, seeds, tea, watercress, pineapple, blackberries, raspberries, lettuce, grapes, lima beans, strawberry, oats and celery.

<b>Essential fatty acids</b>	<b>Source</b>
Alpha linolenic acid	Hemp seeds, walnuts, pumpkin seeds, certain eggs, purslane, green leafy vegetables, mustard leaves, fennel and flax seeds.
EPA / DHA	Salmon, sardines, trout, mackerel, tuna, herring, pilchards and anchovy.
GLA	Safflower oil, sunflower oil, borage oil, sunflower seeds, pumpkin seeds, walnuts and sesame seeds.
Linoleic acid	Evening primrose oil, sunflower oil, sunflower seeds, hemp seeds, pumpkin seeds and sesame seeds.
Arachidonic acid	Meat, eggs, milk and seafood.

<b>Fats</b>	<b>Source</b>
Healthy	<p>Cook / fry with coconut butter or butter (stable under heat).</p> <p>Steam fry with olive oil or sesame seeds oil (low t°)</p> <p>Eat meats, nuts and seeds and fish oils</p> <p>Dress salads with olive, flax or hemp oil.</p>
Unhealthy	<p>Trans fats in processed foods – cakes, biscuits, gravy, margarine, pastry, pies, chips / fries.</p> <p>Hydrogenated fats (read labels)</p> <p>Polyunsaturated vegetable oils</p> <p>Deep fried commercial goods</p> <p>EXCESS saturated fat (some is essential)</p>

<b>Amino acids</b>	<b>Source</b>
Vegetables protein	<p>Combine grains with pulses and legumes, e.g. lentils and brown rice.</p> <p>Quinoa, brown rice, chickpeas, tofu, beans, lentils, sunflower seeds, pumpkin seeds, cashews, peanuts, almonds, peas and beans.</p>
Animal protein	<p>Eggs, dairy, fish, lean meats – chicken, turkey, rabbit and some red meats – beef, lamb, pork and venison.</p>

<b>Semi essential nutrients</b>	<b>Source</b>
Bioflavanoids	Cherries, citrus fruit, prunes, strawberries, apples, raisins, raspberries, blackberries, onions, walnuts, pecans and tomatoes.
Choline	Lecithin, eggs, fish, liver, peanuts, whole grains, nuts, legumes and citrus fruits.
Co-enzyme Q10	Sardines, mackerel, pork, spinach, peanuts, sesame seeds and walnuts.
Inositol	Lecithin, legumes, eggs, fish, liver, melon, citrus fruits and nuts.

<b>Fibre</b>	<b>Source</b>
Starch	<p><b>Long chains of glucose</b> - amylose and amylopectin</p> <p>Seeds and underground tubers, potatoes, sweet potato, beans, pulses and oats.</p>
Oligosaccharides	<p><b>Indigestible chains of fructose</b> – fructooligosaccharides (short) and inulin (long):</p> <p>Leeks, onions, bananas, chicory root, Jerusalem artichoke, legumes and pulses (prebiotics)</p>
Insoluble fibre	<p><b>Cellulose:</b> The main constituent of plant cells, which are long chains of glucose</p> <p>Wheat bran, dried apricots, oats, peas, almonds, beans, prunes, sunflower seeds, lentil, carrots, broccoli, cabbage, cauliflower, apples, bananas</p>
Soluble fibre	<p><b>Hemicellulose:</b> long chains of xylose in plant cell walls</p> <p><b>Gums and mucilages:</b> legumes, oats, nuts and seeds</p> <p><b>Pectins:</b> apples, pears and citrus fruit</p> <p><b>Algal polysaccharides:</b> sea vegetables</p>

<b>Antioxidants</b>	<b>Source</b>
Beta carotene (A)	Carrots, peppers, spinach, sweet potato and kale.
Vitamin C	Peppers, papaya, oranges, grapefruit, kiwi fruit, strawberries, broccoli, Brussels sprouts, cabbage and tomato.
Vitamin E	Avocado, almonds, hazelnuts, peanuts, pistachio nuts, sunflower seeds, salmon, sardines, lentils, peas, beans, walnuts, pecans and cashews nuts.
Zinc	Meat, lambs liver, oysters, pulses, pecans, almonds, quinoa, pumpkin seeds and sardines.
Selenium	Tuna, mushrooms, herring, cottage cheese, cabbage, beef liver, cod, chicken, brazil nuts, sesame seeds and brown rice.

# Chapter 5

## Supplements

What about supplements? Can't we get all the nutrients we need from our food?

Walter Willet, Harvard School of Public Health lead researcher on 3 of the biggest epidemiological studies that followed over 150,000 people over the last 20 to 30 years, suggests that we should take a daily multivitamin. Why?

- Blood sugar management requires B vitamins, vitamin C and magnesium.
- Our soil is depleted meaning less nutrients in food.
- We are exposed to more toxic chemicals than ever before that we must detoxify.
- Remember the section on liver health and that our liver requires vitamins and minerals.
- We need vitamins to turn food in to energy.
- The adrenal glands need vitamin C, B5, B6 and magnesium.

It's not just a multivitamin and mineral we need but possibly also essential fats like fish oil, digestive enzymes, probiotics and extra fibre. Are all supplements the same? Or are more expensive ones just a waste of money...?

# The low down on supplements

With more and more people taking supplements the industry is taking off. However, why are some multivitamins and minerals from a supermarket a lot cheaper than those from a health food shop, what makes the difference, and how can we make informed choices to buy the best products?

First of all, read the label on the supplement as this will tell you if what you are about to buy is a quality product or not. Not all vitamins and minerals are the same. Minerals need to be in an organic form (as opposed to inorganic – not from a source of organic farming) to aid their absorption. For example only 18% of magnesium oxide will be absorbed whereas 85% of magnesium EAP2 will be absorbed. Minerals should be bound to an amino acid to aid absorption; look out for supplements that state they use Albion Chelated minerals. The following inorganic minerals are poorly absorbed:

- Sulphates
- Carbonates
- Oxides
- Chlorides

Look out for organic minerals that are well absorbed such as:

- Citrates
- Picolinates
- Fumarates
- Malates
- Orotates
- EAP2
- Acsorbates

Make sure that your multivitamin and mineral contains no more than 7mg of manganese, as high doses can be neuro-toxic. Make sure the selenium and iodine content are balanced as an imbalance may adversely affect thyroid function. Finally most men don't need to take iron or copper in a multi, excess iron is a pro-oxidant and can cause more harm than good. Menstruating women on the other hand will need iron.

Vitamins are either natural or synthetic; in most cases a natural vitamin is preferred for good absorption. On a supplement's label a natural vitamin is listed with a d before its name, for example d-alpha tocopherol (vitamin E), whereas a synthetic one is listed with dl before its name, such as dl- alpha tocopherol. Vitamin B6 should be in its active form pyridoxal-5-phosphate as this is best absorbed.

Look at the dose of the supplement; if it only has 100% RDA levels, this is nothing to get too excited about. RDA levels are only the amount that will prevent disease, not promote health. For example the RDA for vitamin C to prevent scurvy is 60mg, however it is estimated that we need a minimum of 500mg per day for health – almost 10 times the RDA. The same goes for other vitamins and minerals such as folic acid, B12, zinc and magnesium.

Some fillers and binders are needed in supplements, however the more sweeteners, fillers, binders, additives and preservatives listed on the supplement label the lower the quality of the product. You have to ask why does my supplement need a sweetener or preservatives?

The delivery of the nutrients is important to consider. The best form of delivery is liquid, then powder, then capsules and finally tablets. Some tablets can be compressed so

hard during manufacture that they are not properly broken down during digestion, therefore can't be absorbed. Be wary of time released or enteric-coated supplements, research shows that they do not always do what is claimed and the results depend on you having good HCL levels and strong digestion.

Make sure the supplement you buy is suitable for you. Make sure there are no allergens in the product (soy, wheat, dairy) and if you are vegan or vegetarian or of a certain faith you need to make sure the supplements contain no products that go against your beliefs.

The following companies are the ones I recommend

- BioCare – do the best probiotics in the world, also good for fish oil.
- Nutri – very good herbal and glandular formulations.
- Aliment – good for fish oil.
- Higher nature – good homocysteine products.
- Poliquin performance centre – speciality products designed to balance hormones.

If you are in doubt about your supplement most companies have a technical help line that you can call and get your questions answered.

My top 5 supplements to take:

1. Stomach acid (HCL) – without good stomach acid levels you can't breakdown and absorb your food or supplements.
2. Fish oil – shown to have positive effects in all known diseases, lowers LDL and raises HDL cholesterol, lowers C-reactive protein, homocysteine and triglycerides.

3. A good multivitamin / mineral – provides base line nutrients for good health.
4. Magnesium – many people are deficient, it's involved in over 300 enzymatic reactions, it helps lowers blood pressure, it aids sleep and is involved in energy production.
5. Vitamin D, as it interacts with over 2000 human genes and vital for good health.

# Chapter 6

## Putting it in to practice

So, now you have all this great advice, and I have largely recommended organic, whole foods, fresh fruits and vegetables and eating at organic stores.

Well you can't afford to eat like this? Wrong, in the following pages there are some tips of how and where to shop to save money and how to have a greener kitchen and reduce your electricity bills.

# 10 tips for a greener kitchen

1. Defrost your frozen food in the fridge over night. The cooling effect of the food reduces the energy needed to keep the fridge cold.
2. Preheating the oven takes the most amount of energy. Decide what really needs to be cooked in an oven, as you may be able to use a grill or hobs.
3. Turn your oven off for the last 10 minutes of cooking time and the retained heat will finish off the food.
4. DON'T open the oven door whilst cooking, it loses heat and the thermostat switches the heating mechanism back on, set the timer to cook the food and leave it be.
5. Only fill the kettle with the amount of water you need to use. Don't boil it then walk away, do something else and come back to it. Chances are you'll need to re-boil the kettle wasting electricity.
6. When using a frying pan, steamer or saucepans use a lid. This speeds up the cooking time and reduces the amount of energy you use.
7. A pressure cooker is an old fashioned but effective way to cook soups, stews, stocks and some meat dishes such as lamb shanks. The pressure speeds up the cooking times by 2-3 times. Find a good recipe book for pressure-cooking.
8. Eat as much raw food as possible; there is no energy cost or preparing this food. Investigate a good raw foods cookbook for cured fish and meat, and vegetable dishes.

9. Think about your washing up. Fill the sink with hot water and washing up liquid, rinse the least dirty things first such as wine glasses, cups, cutlery or lightly soiled crockery. Wipe off excess food waste from pots, pans and plates into the bin, then wash. Leave the dirtiest things till last as they will dirty the water and anything you wash after will be covered in dirt and oil. This saves filling the sink with hot water and washing liquid more than once.
  
10. Meal plan and cook 3 or 4 different meals at once. Piggyback different meals in the oven such as chicken, fish, roast vegetables and a dessert. Store the meals in the fridge for 1 or 2 days or freeze for up to a couple of months.

# 10 tips for healthy nutrition on a budget

1. Use compare websites to get the best deals on your products
  - [moneysupermarket.co.uk](http://moneysupermarket.co.uk)
  - [250.co.uk/supermarkets](http://250.co.uk/supermarkets)
  - [comparesupermarkets.com](http://comparesupermarkets.com)
  - [tesco.com/price\\_check\\_search](http://tesco.com/price_check_search)
2. Don't shop when you are hungry, as you tend to buy more. Also do not shop when you are stressed. Stressed backwards = desserts, you end up buying more sugary comfort foods!
3. Plan a budget for your weekly shop and try to stick to it as tightly as possible. You don't have to spend lots of money to be healthy, all supermarkets sell organic food nowadays and healthy fruit and vegetables, tinned fish, chicken and some healthy tinned foods are inexpensive.
4. Meal plan. For example a whole chicken will provide 2 breasts and 2 legs, for 4 meals and 2 wings as 2 snacks. The carcass can make a stock for a soup or a stew. Depending on how many people are eating this could provide a whole days food. A joint of beef can do a couple of meals, some sandwiches and a Thai beef salad. A four pack of salmon can make 2 meals and the other 2 pieces can make fish cakes, another whole day's food. Be imaginative.
5. After you have planned what meats and fish you intend to buy look for products that are at the sell by date or price reduced and freeze them at home to last longer. Avoid the crowds and go to the shops

late at night when produce stocks are low or when products are being cleared.

6. Next buy your vegetables, organic produce is best but is usually more expensive in the supermarkets, however, they are cheaper at farmers markets so search out your nearest one. Farmer's markets produce is generally fresher and locally produced, having less air miles and are more nutrient dense, as it is not picked unripe.
7. Ethnic shops usually provide cheap produce, particularly herbs, spices and pantry goods; explore your local ethnic food shops and supermarkets.
8. Grow your own products; the cost of an allotment, seeds and equipment for a year is roughly £150-200. You could produce over £600 worth of products. Alternatively for the less green fingered person a window box for herbs or potted vegetables can make you savings.
9. Pre-cook and freeze meals. This saves time and energy. For instance make a big batch of tomato sauce; this can be used as the base for a Bolognese or chilli sauce, add some chicken and use as a pasta sauce or add some Mediterranean vegetables for a soup. Reduce it down and add some mixed beans and flax meal to make bean burgers.
10. Save money by cooking 3 or 4 meals at once. Roast a chicken for roughly an hour and a half. At the same time roast a big batch of vegetables and 4 pieces of fish. The chicken will provide several meals served with the vegetables, half the fish can be eaten as it is and the rest can make fish cakes. The

remaining vegetables can make a frittata for the following days breakfast.

# Sign off

I hope that you are now feeling inspired to live and eat healthier or that you are doing so already. I'm confident you will begin to feel the benefits of this new way of eating very soon, just stick with it and inspire your loved ones to do the same.

Thank you.

# My inspiration

Please read the following peoples books and visit their websites.

- Jonny Bowden, 150 Healthiest Foods on Earth
- Jonny Bowden, Healthiest Meals on Earth
- Patrick Holford, The Optimum Nutrition Bible
- Patrick Holford, New Optimum Nutrition for the Mind
- Charles Poliquin, German Body Comp
- Paul Chek, How to Eat Move and be Healthy
- Marilyn Glenville, The Nutritional Health Handbook for Women
- Michael Murray and Joseph Pizzorno, Encyclopaedia of Natural medicine

<http://www.jonnybowden.com>

<http://www.charlespoliquin.com>

<http://www.chekinstitute.com>

<http://www.patrickholford.com>

<http://www.marilynglenville.com>