



**IRISH HEART
FOUNDATION**
Fighting Heart Disease & Stroke

The **Fats** of **Life**

**The Lowdown on
High Cholesterol**

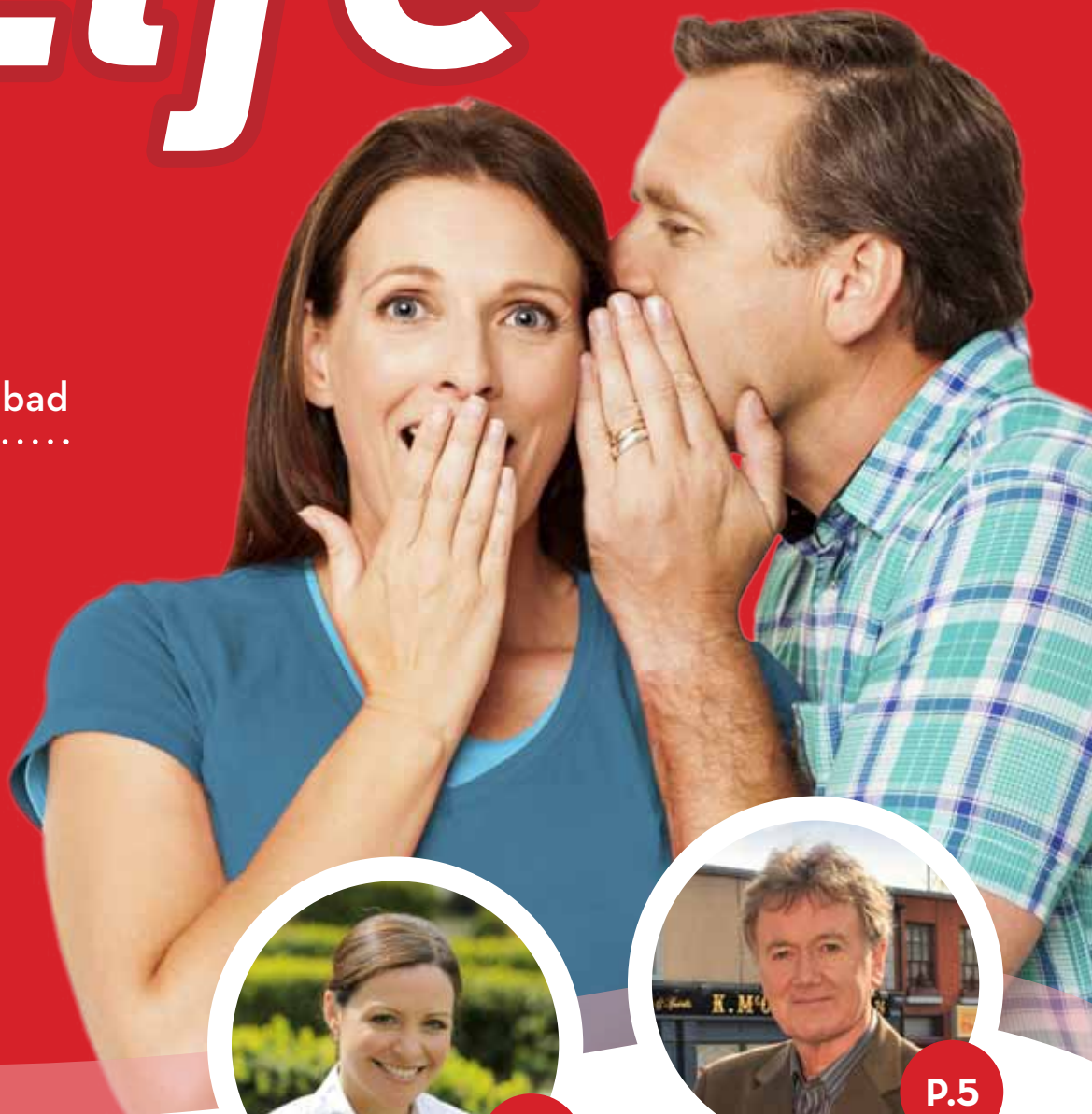
**Facing Fats -
the good and the bad**

**Better swaps for
your heart**

**Take our quiz on
the fats of life**

**The NEW
Food Pyramid**

**A heart
attack at 34**



P.16

**Catherine Fulvio's
Recipe Corner**



P.5

**Bryan Murray takes
control of his cholesterol**

INSIDE

contents

3. **Do you know the Fats of Life?**
Find out with our quiz
4. **10 facts on fat that you need to know**
5. Fair City actor **Bryan Murray** reveals how he tackled his high cholesterol
6. **Donal Herlihy** shares his experience of a heart attack at 34 and how he has coped
8. **Dietitian Janis Morrissey** gives us the skinny on good and bad fats
12. **The Food Pyramid** – don't aim for the top!
14. **After her heart attack, Barbara Gallagher** worried that she wouldn't live to see her daughters grow up
16. **Recipe Corner** – Catherine Fulvio shares her delicious orange chicken stir fry
17. **Spread yourself thin** – a guide to butter, spreads and oils
18. **Improve your cholesterol by quitting smoking**
19. **Dr Angie Brown** gives the lowdown on high cholesterol
20. **Cholesterol and physical activity**
21. **Shopping tips** - fight the fat on the supermarket shelves
22. **Check your cholesterol**



The Irish Heart Foundation is the national charity fighting heart disease and stroke.

We support, educate and train people to save lives, campaign for patients, promote positive health strategies, fund research and provide vital public information.

We need your support – through donations, as a volunteer or on our training courses.

Registered Charity Number: CHY 5507

WHAT IS CARDIOVASCULAR DISEASE?

Cardiovascular disease is a broad term to describe many diseases that can affect the cardiovascular (heart and blood vessel) system, including diseases of the heart valves, of the heart muscle, of the arteries and of the veins. By far the most common type of disease in the system occurs as a result of hardening of the arteries, 'atherosclerosis', which most often leads to a heart attack and a brain attack or stroke.

A major risk factor for cardiovascular disease is high cholesterol.



Facing Fats

You probably already know that fat in the diet has something to do with heart disease and stroke. But, like many people, you may be confused about the different types of fat, what happens to them in your body and how they affect your risk of heart disease and stroke.

Through the Fats of Life magazine, we will share facts

on fat, cholesterol and your heart. We will expose some common myths about the foods you should eat for a healthy cholesterol and provide lots of great tips on how to eat more good fats and less bad fats.

The people in our case studies share their revealing stories of how they manage their cholesterol levels

and give insights into how changing their eating habits and being more active has had a big impact on their heart health.

I hope you enjoy learning the Fats of Life!

Janis Morrissey,
Dietitian, MINDI, Irish Heart Foundation



quiz

Try our quiz and see what you know about the Fats of Life.

DO YOU KNOW THE FATS OF LIFE

1 The fats you eat can affect your cholesterol levels?

True or false?

- a) True
- b) False

2 Which of these fats can increase your risk of heart disease?

(choose one or more of the following)

- a) Polyunsaturated fat
- b) Monounsaturated fat
- c) Trans fat
- d) Saturated fat

3 Having too much saturated fat in your diet can...

(choose one or more of the following)

- a) Increase the amount of cholesterol in the blood
- b) Lead to a build up of fatty deposits in the arteries that supply the heart
- c) Increase the risk of heart disease and stroke

4 Which of the following types of food are high in saturated fat?

(choose one or more of the following)

- a) Cakes and pastries
- b) Oily fish
- c) Cheese
- d) Eggs

5 Which of the following foods contain mainly unsaturated fats

(choose one or more of the following)

- a) Oily fish
- b) Dairy foods like milk and yogurt
- c) Cakes and pastries
- d) Nuts

Why not try the quiz again after reading this magazine?

10 FACTS ABOUT FAT, CHOLESTEROL & HEART HEALTH

1 You need fat as part of a healthy diet.

You need some fat for energy, to protect your body organs, for healthy cells and to provide essential nutrients. The problem is that nearly two thirds of Irish adults eat more fat than their bodies need for health.

2 All types of fat, both good and bad, are high in calories so you only need small amounts in your diet.

Too much of any type of fat in the diet can lead to overweight and obesity. There are 9 calories (listed as kcal on a food label) in one gram of fat. That's more than twice the calories of carbohydrate and protein, which are both 4 calories per gram.

3 Too many bad fats such as saturated fat in the diet can increase LDL (bad) cholesterol.

Saturated fat is found in cakes, biscuits, pastries, butter, hard margarine, cheese and fatty meat. The best way to cut down on saturated fat is to limit foods from the top shelf of the Food Pyramid.

4 Trans fat is an especially bad fat as it can increase LDL (bad) cholesterol and also decrease HDL (good) cholesterol.

Trans fat is found in

processed foods such as cakes, biscuits, pastries and deep-fried foods found mainly on the top shelf of the Food Pyramid. Small amounts also occur naturally in meat and dairy products. The best way to cut down on trans fat is to try to avoid foods with 'hydrogenated fat' or 'partially hydrogenated oils' listed in their ingredients and to limit foods on the top shelf of the Food Pyramid.



5 You don't need to cut out meat for a healthy cholesterol.

Meat is an important source of iron which you need for healthy blood. Choose lean cuts of meat and lean mince and use low fat cooking methods like boiling, grilling or oven-baking. Watch your portion size.

6 You don't need to cut out dairy foods for a healthy cholesterol.

Dairy foods are an important source of calcium which you need for healthy bones. Go for low fat milk, yogurt and cheeses. Low fat dairy products have just as

much calcium as the full fat varieties so they are just as good for your bones.

7 An egg a day is OK.

If you don't have high cholesterol, you can eat up to seven eggs in a week. Eating foods that contain cholesterol, such as eggs, does not greatly affect the amount of cholesterol in your blood. It's the saturated fat in the diet that is the main cause of a high cholesterol level. If you have been diagnosed with a high cholesterol you may be advised to eat less eggs, depending on your diet.



8

Not all fat is bad.

Good fats such as monounsaturated fat help reduce LDL (bad) cholesterol. Replace some bad fats in your diet with good fats. Monounsaturated fat is mainly found in vegetable oils such as olive and rapeseed (canola), spreads made with these oils, avocados, seeds and some nuts (for example cashews, almonds and peanuts).



9 Some types of fat are essential.

There are two main types of polyunsaturated fat: **omega 3 fat** (found in oily fish such as salmon,

mackerel, trout, herring and sardines) and **omega 6 fat** (found in vegetable oils such as sunflower, safflower, soya bean, corn and sesame oils). These fats are sometimes called essential fats because your body cannot make them and you have to get them from the food you eat. By switching to polyunsaturated fats you can help reduce your LDL (bad) cholesterol.

10 Some good fats not only lower LDL (bad) cholesterol but can also help keep your heart healthy.

Omega 3 fat found in oily fish can help your heart to keep a healthy rhythm and prevent blood clots as well as helping to lower a type of fat in your blood call triglycerides. Tuna is also an oily fish. However, if you're using tinned tuna, make sure the label says that omega 3 fats have been replaced, as these fats are normally lost when tuna is tinned.



How Bryan Murray Took Control of His Cholesterol

Despite his healthy lifestyle, Fair City actor Bryan Murray was diagnosed with high cholesterol. He tells us what he did about it and why he thinks men in particular need to 'man up' and take care of their health.

For the past number of years, Bryan Murray was having a 'health NCT' by going to the doctor and having blood work done, "just to keep myself in check".

"I've always tried to maintain a healthy lifestyle; when you reach a certain age you want to make sure everything is functioning well and that there are no warning signs. About four years ago, I was in with my doctor who did the tests. The bloods came back and my cholesterol was very high – it was 6.9.

"There had been no signs of that before and I was a bit shocked and disappointed with myself! I thought, what am I doing wrong? The doctor gave me the option of going on tablets to lower my cholesterol or trying to combat it myself and I decided to try and lower it myself."

Making changes

Bryan made important changes and for six months, cut out foods such as cream and cheese (which he loves) and walked longer than he normally did.

"The side effect was that I lost weight and when I went back to the doctor my cholesterol was now back down to normal."

However, the next time he had his health NCT, his cholesterol was back up again, despite keeping up healthy eating and exercise habits.

He was faced with the option of going on the strict regime

again or taking statins to help bring down his cholesterol.

"The statins option seemed to be a no-brainer, as they would lower my cholesterol. So although I had the fleeting thought 'is this the age I am now, going on medications?' I thought wisely about it and I went on the statins."

Medication

After going on the medication, he allowed himself to relax his eating habits somewhat: "it gave me a sense of normality".

"I've always been pretty good at exercising. I try to walk about 40 minutes every day and some days I'll do 50 minutes. I'll walk by the river or the sea and it's part of my daily routine."

He makes the point that high cholesterol does not always run in families.

"My father never had high cholesterol and he only died last year at almost 90 years of age. One of my brothers has it but the other one doesn't."

Bryan says that he can't imagine anything more fundamental than your heart – "you can carry on with many other accidents or illnesses but the heart is core to life – if your heart goes west that's the end of it". He believes that men in particular can be "wusses" when it

"The side effect was that I lost weight and when I went back to the doctor my cholesterol was back down to normal"

"The benefits of prevention and being aware of your health are amazing and potentially life-saving"

comes to taking care of their health.

"There's sort of an attitude of 'ah, sure I'll ignore that and it will go away'. The problem is it won't go away. Men really need to take more responsibility and control of their own health. The benefits of prevention and being aware of your health are amazing and potentially life-saving.

"I'm delighted to help with this campaign – to play a modest part. I hope my involvement with the Irish Heart Foundation encourages people to take over the reins of their own wellbeing. Give it a go lads – the needle won't hurt that much."



A Heart Attack at 34

“I woke up about three in the morning with chest pains, which I put down to heartburn, after ‘a rough’ weekend that included a 21st and two 30th birthday parties, with a lot of cocktail sausages, spicy wedges and beer mixed in together.”

When Donal Herlihy had a heart attack at the age of 34, he was smoking a pack of cigarettes a day, drinking five or six pints two nights a week, had high blood pressure, high cholesterol and wasn't exercising.

“My diet wasn't great, I was fond of take-outs on the way home after a night out. I am more of a vegetable eater now but back then I wasn't. I pretty much ticked every box on the leaflet for signs of a heart attack,” says the photographer and designer.

“I was aware I had high cholesterol and I was trying to get that down. It was nearly 9 at one stage and I got it down to around 7. I was trying to do a little bit of exercise but really I gave it up.”

Rough weekend

Donal's heart attack happened in October 2011, following what he describes as a “rough weekend” that involved a 21st on the Friday and two 30th parties on the Saturday.

He plays the drums and went to rehearsal on Monday night, even though he really didn't feel up to it and felt ill throughout.

“That night I woke up, this time with an awful weight on my chest; every time I lay down, I felt like there was someone standing on my chest, so I sat up all night.

“I went to the GP on Tuesday, not my usual doctor and I convinced him that all I needed was some heartburn tablets. So for three weeks, I was not able to walk from here to the corner

without getting an icy feeling in my throat, it was sore to breathe.”

Despite this, Donal decided that he would finish the course of tablets, never suspecting it could be a heart problem. He went on a trip to London, going to Stamford Bridge to see Chelsea versus Arsenal. “I was a walking time bomb now that I think about it because the tension in that match was so great!”

Hospital

On his return to Dublin he went back to his regular GP.

“I told him what had happened over the past three weeks, and he sent me straight away to the Mater. I went in and got an ECG (an electrocardiogram - a test to check the rhythm of the heart and if there is evidence of a heart attack) and a couple of blood tests - I was there for hours. I couldn't imagine what was keeping them.

“The doctor eventually came in and said, ‘from what we've done, we're not 100 percent sure what's wrong, so the only thing to do now is an angiogram.’ I didn't have a clue what that was. The doctor said ‘we think you might have had a heart attack! The colour drained out of me.”

Procedures

The angiogram was scheduled for Friday morning. An angiogram is a test to see if the coronary arteries, which supply blood to the heart, are flowing freely. A tube was placed into the blood vessel near his wrist, which carried dye directly to the blood vessels of his heart. Donal was semi-conscious for this and was amazed at how quickly it was over - he was home that evening.



What is a heart attack?

After the angiogram, the doctor rang to say that Donal needed to have a stent put in on Monday. A stent is a metal mesh or coil which keeps the diseased or narrowed artery open. It turned out that Donal had actually had two heart attacks – one on the Saturday night and one on the Monday night.

He eased off the cigarettes over the weekend. He had his last one ever outside the Mater, before he went in to have the stent inserted. Donal was “half the age” of everyone else on his ward and they all lectured him about his lifestyle. His doctor also put him on tablets, including statins for his cholesterol, aspirin to thin the blood, and beta blockers to regulate his heart.

Recovery

“The day after the stent was put in, my chest felt like I had been doing press ups all day. My heart had stopped momentarily during the procedure and I needed a jolt of the defibrillator which caused the stiffness in the chest muscles. This apparently is not that unusual! But I found it hard to walk and as I had a lot of bruising I didn’t overdo it and I’d go around the block in the morning once. I was out of work for three weeks and as the days and weeks went on, I would do one block and the next block, and the loop was getting bigger.

“After three months, I went back to see my doctor in the Mater and he was very happy with how everything was looking. He suggested cardiac rehabilitation, a recovery programme after a heart attack, but I thought, ‘I’m young enough, I don’t need it,’ so I didn’t take him up on it.”

A year later, Donal went back for another check-up. His doctor was happy to hear that he was still off the cigarettes, had improved his diet, was losing weight and was being more active. His doctor sent him off, telling him ‘hopefully I’ll never see you again.’

Dealing with the fallout

However, Donal found that he was still struggling mentally with his condition. He found on holidays that he was having panic attacks when he tried to do activities like horse riding and scuba diving.

“I thought, ‘I’m on my own out here and if something happens to me, no one out here knows I have this condition, what’s going to happen?’”

“I went back to the doctor and asked him whether it was too late to do the cardiac rehab. I wanted to know if there was any mental side to having a heart attack.

They arranged for me to do cardiac rehab in the Mater and they convinced me to do a bit of the physical activity and dietary education as well.

“The psychologist helps you deal with stress and they arranged for me to see him separately after the rehab was over. I have one more session left with him. I found it a great help.”

Donal advises other people to go for regular cholesterol and blood pressure tests and to improve their lifestyle. “It can happen to anyone, no matter what their age. Prevention is the best form of health care.”

“The other thing was that I never got pain in my left arm, which was one of the reasons I convinced myself it wasn’t a heart attack. I’d like to make people aware that there are other symptoms to watch for and not to rely on the left arm pain as an indicator as I did.”

“It turned out that Donal had actually had two heart attacks – one on the Saturday night & one on the Monday night”

A heart attack happens when the heart muscle is damaged due to a blockage in the heart’s blood supply. This is caused by the build-up of fatty substance (atheroma or plaque) on the coronary artery wall which tears or breaks off causing a clot to form in the artery, blocking the blood supply to the heart muscle.

Heart attack symptoms

The most common symptom of a heart attack for men is chest pain. This is usually a crushing or tight pain, which may move to your jaw or arms, particularly on the left side. But not everyone experiences chest pain when having a heart attack and some have no chest pain at all or have other symptoms. For women heart attack symptoms are often more vague such as nausea, tiredness, shortness of breath, back pain or tightness in the jaw rather than the more classic chest pain.

- Chest pain
- Upper body pain in the jaw, back, neck or arms
- Shortness of breath
- Sweating
- Nausea
- Light-headedness
- Loss of consciousness
- Weakness
- Tiredness

Not all the above symptoms are always present. Don’t delay get help fast. Call 999 at the first sign of a heart attack.

Janis Morrissey, dietitian with the Irish Heart Foundation, explains the difference between good and bad fats and how we can eat for better health.

The Skinny on Fats

There is a mountain of information on fats and their effects on health, particularly cholesterol and heart disease, but much of it can be confusing, and contradictory.

One of the things I want to emphasise is that not all fats are bad and that we do need some fat in our diets.

Fats are a source of energy for the body and also help protect our body's organs; we need a layer of fat around our heart, our liver and our kidneys to help protect them. Fat acts as an insulator to keep our body warm and fat is also needed for healthy cells.

“We’re not getting enough of the good fats and we’re getting too much of the bad fats.”

The problem is that Irish adults have too much total fat in their diets. As well as this, we’re not getting enough of the good fats and we’re getting too much of the bad fats.

What are bad fats?

I’ll start with the fats that cause most of the concern and debate. These two main fats are particularly bad or harmful for our cholesterol, namely – saturated fat and trans fat.

swap it!



Research shows that Irish adults have too much total fat in their diets.



Saturated fat can raise LDL (bad) cholesterol and increase risk of heart disease and stroke.

This type of fat is found mainly in cakes, pastries, butter, but also in dairy products and meat, as well as palm oil and coconut oil. The best way to reduce the amount of bad fat in our diet is to reduce the amount of food from the top shelf of the Food Pyramid (see pages 12 and 13).

The fact that there can be saturated fat in meat doesn't mean that you have to cut it out of your diet completely. Instead choose lean cuts, trim any visible fat off and use healthy cooking methods such as grilling, boiling and baking rather than frying. The same goes for dairy products, such as milk, cheese, yogurt. Although they

do contain some saturated fat, and a little trans fat as well, choosing low fat versions allows you to still include them in your diet. Low fat versions are just as high in calcium as full fat versions and so just as good for your bones.

Trans fats

Trans fats lower HDL (good) cholesterol and increase LDL (bad) cholesterol. But it can be hard to identify what foods contain trans fats as they aren't usually listed on the food label. The best way to figure out if they are in a food is to look at the ingredients list. If it mentions hydrogenated fat, or partially hydrogenated oils, then that means that there are probably trans fats in the food, so you really should try to avoid it. When you see partially

hydrogenated oil, you see oil and maybe think 'oh, that's probably fine,' because most people think oils are good.

Also look for trans fats in ready meals. There has been a reduction in trans fats in these foods recently, but it's still worth being vigilant when looking at the label.

Fried food is another trans fat culprit. When the oil used in deep fat fryers is heated up to very high temperatures, cooled down and then is heated up and cooled down again, over time the extremes of temperature change the chemical structure of the oil and cause the creation of trans fats.

Making smart choices

If you are going to choose cakes, biscuits or pastries - foods which are generally high in saturated fat - look at the food label and try and compare products. For example, when choosing between two cakes, compare the saturated fat in each



Battered Fish



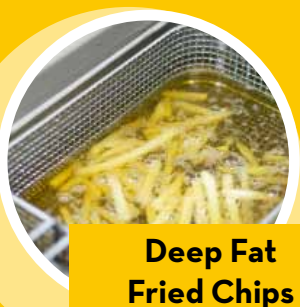
Fresh Fish



Full fat Milk



Low Fat Milk



Deep Fat Fried Chips



Oven Chips



The Skinny on Fats

continued

and try and choose the one with the lower saturated fat content.

Cholesterol in food

The thinking in past decades was that if there was cholesterol in your food, then it increased the cholesterol in your blood.

We know now that the amount of saturated fat in your diet is the main factor that increases the cholesterol in your blood. Foods like eggs, seafood, liver and other types of offal do contain cholesterol, but if they are in your diet, they don't have much of an effect on the cholesterol in your blood at all.

Eggs can be included as part of a heart healthy diet as they are very nutritious and a great source of iron and protein. If you haven't been diagnosed with a high cholesterol, the

recommendation is that you can have up to seven eggs in a week.

What are good fats?

The good news is that the good fats help reduce the LDL (bad) cholesterol in our blood, and they can replace some of the bad fats in the diet.

However, all fats are high in calories and often people eat more than the recommended portion size which is still too much. It's all to do with perception, what we perceive as a normal portion has increased hugely in the past two decades. The Food Pyramid on pages 12 and 13 provides you with clear guidance on portion size.

Cholesterol-lowering foods

If you have high cholesterol, there is now a range of foods that can help

lower your cholesterol. These include spreads, yogurt and milk. These foods have ingredients which stop your body absorbing cholesterol.

If you have a high cholesterol, you may benefit from using these products as part of a healthy varied diet. However you should seek your doctor's advice as these products can be expensive and are not a replacement for prescribed medication or a healthy lifestyle.

“The amount of saturated fat in your diet is the main factor that increases the cholesterol.”



Cut the fat if you are overweight or obese.

Not only is fat in our diet a major influence on our cholesterol and risk for heart disease and stroke but too much fat in our diet can lead to overweight and obesity, major risks for the leading cause of death in Ireland.

The weight of the nation is never far from the news because we are getting heavier and larger. Over 60% of Irish adults, men and women, are either overweight or obese.

Looking at men and women aged between 51-64, only 14% of men and 30%

of women are at a healthy weight. A very high number of men in this age group are obese at 42% and 30% of women. Another 44% of men are overweight and 39% of women in this age group.

Losing weight successfully is very difficult for many people but it can be done, as shown by Donal and Barbara featured in this magazine. Apart from motivation, which is vital, there are some key steps.

To lose weight

- > **Plan your meals**, what you will eat and your portion size using the Food Pyramid.
- > **Plan to lose weight gradually** (1-2lbs per week). Do not expect instant results.
- > **Make small changes in your diet** rather than drastic changes all at once.
- > **Burn off calories by increasing your level of physical activity** such as regular walking, swimming or cycling.
- > **Cut out** the foods and drinks from the top shelf of the Food Pyramid. (see Pages 12 and 13).

Good Fats

Unsaturated fats reduce LDL (bad) cholesterol

Monounsaturated fats are found in:

- Olive oil
- Peanut oil
- Rapeseed (canola) oil
- Spreads that contain these oils
- Avocado
- Seeds
- Cashew nuts
- Almonds
- Peanuts

Polyunsaturated fats:

Omega 3 fats are found in:

- Oily fish such as salmon, mackerel, trout, herring, sardines and fresh tuna
- Omega 3 fats in tuna are normally lost during the tinning process. If you are using tinned tuna, make sure the label says that the omega 3 fats have been replaced

Omega 6 fats are found in:

- Vegetable oils such as sunflower, safflower, corn, soya bean and sesame oils
- Soya beans
- Walnuts, hazelnuts and brazil nuts



Bad Fats

Saturated fats and trans fats increase LDL (bad) cholesterol

Saturated fats are found in:

- Butter
- Lard
- Hard margarine
- Cheese
- Cream
- Whole milk
- Fatty meats
- Cakes
- Biscuits
- Chocolate
- Coconut oil
- Palm oil
- Many ready-meals and processed foods. Check food labels to find out how much saturated fat they contain

Trans fats are found in:

- Cakes
- Biscuits
- Pastries
- Deep-fried foods
- Hard margarines
- Any foods or ready-meals containing hydrogenated oil or hydrogenated fat are likely to have trans fats



Use the Food Pyramid to plan your daily healthy food choices



Alcohol weekly lower risk limits

Men:

17 standard drinks
(170g alcohol over a week)

Women:

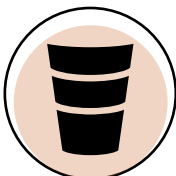
11 standard drinks
(110g alcohol over a week)

Standard drinks (SD) contain roughly 10g of pure alcohol

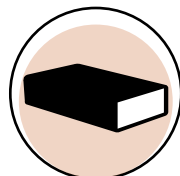
1 SD =  1/2 pint beer  single measure spirit  small glass wine



Drink at least 8 cups of fluid a day - water is best



Use a **200ml disposable plastic cup** to guide portion size of cereals, cooked rice and pasta, and even vegetables, salad and fruit.



A **matchbox** can guide you on a serving of cheese. Reduced-fat options are best.



High in fat, sugar and salt
eat every day.

fat spreads and oils

Choose as possible. Choose reduced-fat or light spreads, 1 portion pack for 2-3 slices of bread. Choose rapeseed, olive, canola, sunflower or corn oils, 1 teaspoon per person when cooking. Remember mayonnaise and salad dressing also contain oil.

1 Serving size =

(The actual portion you eat may be bigger or smaller than a serving.)

Meat, poultry, fish, eggs, beans and nuts

Choose lean meat and low-fat cooking methods (grilling, baking, steaming or boiling). Choose fish twice a week – oily fish is best.

50-75g cooked (100g or size of a pack of cards uncooked) lean beef, pork, mince or poultry
100g cooked fish, soya or tofu
6 dessertspoons of peas, beans or lentils
2 eggs
40g unsalted nuts

Milk, yogurt and cheese

Choose 3 servings a day.
Aged 9-18 years – choose 5 servings a day.
Reduced-fat or low-fat varieties are best.

1 glass milk (200ml)
1 carton yogurt (125g)
1 yogurt drink (200ml)
1 matchbox size (25g) of hard or semi-hard cheese such as cheddar or edam
50g soft cheese such as brie or camembert

Fruit and vegetables

Choose 5 or more servings a day.

1 medium sized fruit – apple, orange, pear or banana
2 small fruits – plums, kiwis, mandarin oranges or 10 grapes
½ cup or 4 dessertspoons of cooked vegetables – fresh or frozen
1 bowl of salad – lettuce, tomato, cucumber
100ml unsweetened fruit juice

Breads, cereals, potatoes, pasta and rice

Choose at least 6 servings. High-fibre varieties are best. Include in each meal.

1 thin slice of bread
2 breakfast cereal wheat or oat biscuits
3 dessertspoons of dry porridge oats or muesli
4 dessertspoons of flake type breakfast cereal
3 dessertspoons of cooked pasta, rice or noodles
1 medium or 2 small potatoes

The **palm of the hand**, width and depth without fingers and thumbs shows how much meat, poultry or fish you need in a day.



Portion packs of reduced-fat spread found in cafes can guide the amount you use. One should be enough for 2-3 slices of bread.



A **5ml teaspoon** can guide your portion size for peanut butter, jam, marmalade or honey.

A Heart Attack Waiting To Happen

At 31, Barbara Gallagher had a heart attack. A genetic condition had already given her “shockingly high” cholesterol. She explains what happened and how she completely changed her priorities – and her whole life.

The
Fats
of
Life

I would still have ridiculously high cholesterol even if I lived on lettuce leaves. I have a condition called familial hypercholesterolemia (inherited high cholesterol) that’s been passed down through the genes in the family. It’s not your traditional high cholesterol that comes from poor diet and lack of exercise. At 14, I was found to have cholesterol of 11, which is outrageously high.

No symptoms

Statins hadn’t been invented, so the advice was “skimmed milk, Flora, and cut out the cakes.” I hated the skimmed milk, never liked the Flora, and I soon graduated back onto full milk and butter again.

When I was pregnant with my second daughter in London, I saw a very young, enthusiastic American intern at the maternity hospital and he established that my cholesterol was particularly high, it was about 14 at the time. I said ‘I know

about that, it’s in the family, nobody’s ever died from it.’

He said I’d have a heart attack by 30 if I didn’t act. The doctors put me on a special drink to help lower my cholesterol. It was like thick wallpaper paste. I tried a few sachets and said ‘no – I’d rather die young and happy’, as you would at that ill-informed age. I was 29.

We had to move back to Ireland when my mother became seriously ill. We put ourselves under a lot of pressure. I was struggling to find work and putting on weight. I got

more depressed; I had no energy, was smoking up to 25 cigarettes a day and not exercising.

It was St Patrick’s weekend and I felt a bit of pain like the feeling you have when a chest infection is coming on. However by the

Monday I was gripping the arms of the chair trying to breathe. I was so ill we called the doctor to come around.

I mentioned that I was having hot and cold flushes, as you do when pain

erupts. And he said, “I know what it means – early menopause.” I was 31 years of age!

The bad news

He gave me a letter to go to Beaumont for a chest x-ray and he added “ECG” to the instructions. An electrocardiogram (ECG) is a test that records the electrical activity of the heart. After the ECG they said they wanted a cardiologist to see me. I suspected it might be something to do with cholesterol.

I was whisked to the Coronary Care Unit (CCU) but it wasn’t until the next day that I realised how serious things were. He said, “You do know you’ve had quite a substantial heart attack?” I was in shock. It turned out my cholesterol level was 18!

Recovery

I needed angioplasty. This involves inserting a balloon to widen the artery but following some complications I also needed a stent – a tube which keeps the artery open.

My thinking at the time was, my girls are three and six, I’m not going to see them in their communion dresses, let alone see them in their wedding dresses.

“The intern told me I would have a heart attack by 30 if I didn’t do something about it”

“My thinking at the time was, my girls are three and six, I’m not going to see them in their wedding dresses.”

In the three weeks I spent in Beaumont I felt that it was the greatest place and I decided I would make it my life’s ambition to work there. So, I’ve been working in cardiovascular clinical trials at the RCSI Clinical Research Centre at Beaumont Hospital for the past 14 years!

A new life

My husband Michael said, “What are you going to do with your new life? You do realise you’ve been given a second chance.” That’s when the gravity of it all hit home.

I figured out the three most important things are – your health, a roof over your head and a meal on the table. After that, everything else should be considered a bonus.

I was put on a statin and a beta blocker, and the various other medicines I would need for the rest of my life. I also went on an excellent cardiac rehabilitation programme. I lost two and half stone in the following nine months, I got fit and participated in a 10k walk.

I changed my diet. When I came home, Michael had cleared the cupboards of every last item of processed food we had. Instead of tomato sauce, we’d make our own ragu, we had fresh fish every day and we chose things like boneless skinless chicken breasts and lots of salads.

I got a new start. I hope people will take care of their health and watch their cholesterol so they don’t get the fright I got. It’s never too late to make a fresh start.

HOW TO LOWER CHOLESTEROL

Choose fewer foods from the top shelf of the Food Pyramid such as chocolate, crisps, cakes, biscuits, sweets.

Get down to a healthy weight – being overweight means the heart has to work harder to pump blood around the body.

Eat oily fish twice a week.

Choose lean meats.
Trim fat off meat and skin off chicken.

Drain oil from cooked dishes containing minced meat.

Choose low-fat dairy products and spreads.

Use low-fat healthy ways of cooking, like grilling or oven baking instead of frying.

Eat more fruit and vegetables.

Eat more wholegrain varieties of cereals, breads, pasta and rice.

Be more physically active every day.

Stop smoking. Smoking raises your cholesterol and increases risk of heart attack and stroke.

If you have been diagnosed with high cholesterol, your doctor will advise changes to your lifestyle. If you are also prescribed medication it is important you follow the instructions fully.

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RECIPE CORNER

Orange Chicken Stir Fry

Preparation time: 10 mins

Cooking time: 20 mins

Serves: 4

Catherine Fulvio

Ballyknocken House & Cookery School,
Co. Wicklow

This is an excellent stir fry that could be on the table in less than 30 minutes making it a perfect mid-week meal that all of the family will enjoy. Of course you could replace the chicken with pork fillet for great results. Pak choy is a green vegetable which is now grown in Ireland, but spinach would also work well.

What you need:

- finely grated rind and juice of 2 oranges
- ½ teaspoon Thai fish sauce (nam pla) - optional
- 1 teaspoon light brown sugar
- 1½ tablespoons light soy sauce
- 2 garlic cloves, finely chopped
- 1 tablespoon vegetable oil
- 2 x 100g (4oz) skinless chicken fillets, diced
- 1 red chilli, finely sliced into rings (wear rubber gloves)
- 2 spring onions, finely sliced
- 2 pak choy, roughly chopped
- small handful fresh coriander leaves, roughly chopped
- 2 handfuls bean sprouts & brown rice to serve

What you do:

Combine the orange rind and juice, fish sauce (if using), brown sugar, soy sauce and garlic in a small bowl. Set aside until needed.

Heat a wok until very hot, then add the oil and swirl up the sides. Tip in the chicken and chilli and stir fry for 2-3 minutes or until the chicken is just tender and lightly golden.

Add the spring onions to the chicken mixture and stir fry for another minute or so. Pour in the orange mixture and continue to stir fry for another 2-3 minutes.

Add the pak choy to the chicken and orange mixture, with the coriander and bean sprouts, and cook for another minute, tossing the wok occasionally until everything is nicely combined.

Divide the orange chicken stir fry into Oriental-style bowls and serve with the brown rice.



**IRISH HEART
FOUNDATION**
Fighting Heart Disease & Stroke

This recipe is from the Irish Heart Foundation's cookbook *I Love Good Food*. To order visit www.irishheart.ie/shop or call (01) 6685001.

Per Portion

Energy Kcal/Calories	245
Fat (g)	4.6
Of which saturates (g)	0.8
Salt (g)	1.0
Sugars (g)	5.1

SPREAD YOURSELF THIN: A GUIDE TO BUTTER, SPREADS & OILS



There are many different types of butters, spreads and oils available in the supermarket and it can be difficult to know which product to choose. However, you only need small amounts of these foods as they are **all** very high in calories. Choose low fat and reduced fat spreads and oils such as rapeseed or olive oil instead of hard margarine or butter.

SPREADS

Butters, spreads and oils are **all** very high in calories

There are many types of spread on the market but not all spreads are typically low in fat. Low fat spreads are lower in calories and fat than butter or other types of spreads as they contain less fat and more water. Spreads that contain around 40% fat are best for using on bread etc but they are only needed in small amounts. A heaped teaspoon of low fat spread should cover 2 slices of bread while a heaped teaspoon of full

fat spread or margarine should cover 3 slices of bread.

Low fat spreads are not suitable for cooking or baking as they are too high in water. Other types of spreads with more than 40% fat are a healthier alternative to butter in baking as they contain less saturated fat. The food label usually states whether a spread is suitable for baking or cooking.

OILS

Allow one teaspoon of oil per person when cooking

All oils are almost 100% fat and are only needed in small amounts. Most oils are high in good fats and low in bad saturated fat but palm oil and coconut oil are exceptions. Allow one teaspoon of oil per person when cooking. A good non-stick pan helps to start food off

with little or no fat at all. Try using an oil spray or a teaspoon to control the amount of oil that you use. Mayonnaise and oil-based dressings also count towards your oil intake so choose small amounts of lower fat options.

BUTTER

Butter contains 80% fat. It is high in saturated fat which can increase your LDL (bad) cholesterol. It should only be eaten in small amounts on special occasions and no more than once a week.



Top Tip

"I find that using suitable oils like olive and rapeseed oil in cooking and baking makes for healthier meals without compromising on taste or texture. Oils work particularly well with sponge cakes, shortcrust and filo pastry, biscuits, muffins and flatbreads like foccacia."

Bidy White Lennon, food writer and judge in 'The Great Irish Bake Off' on TV3.

IMPROVE YOUR CHOLESTEROL: **STOP SMOKING**

SMOKERS ARE TWICE AS LIKELY TO SUFFER A HEART ATTACK AS NON-SMOKERS AND SMOKERS DIE ON AVERAGE 10 YEARS YOUNGER THAN NON-SMOKERS.

Smoking increases your LDL (bad) cholesterol and reduces your HDL (good) cholesterol.

Stopping smoking is the best thing you can do to protect your heart and blood vessels. The good news is that it's never too late to stop smoking.

**Contact the Irish Heart Foundation's
Heart and Stroke Helpline Locall 1890 432 787**



Know Your Blood Pressure

High blood pressure is a major risk factor for heart attack and stroke. High blood pressure has numerous causes. It can be hereditary and tends to increase with age but in many people it is made worse by eating too much salt, by being overweight or obese, being inactive, consuming too much alcohol and smoking.

If your blood pressure is high it means your heart has to work extra hard to pump blood around your body. This can lead to thickening of the heart muscle and eventually may lead to heart failure. The only way to check your blood pressure is to have it measured by your doctor or a health professional. It's a straightforward procedure which only takes a minute, but it's important.

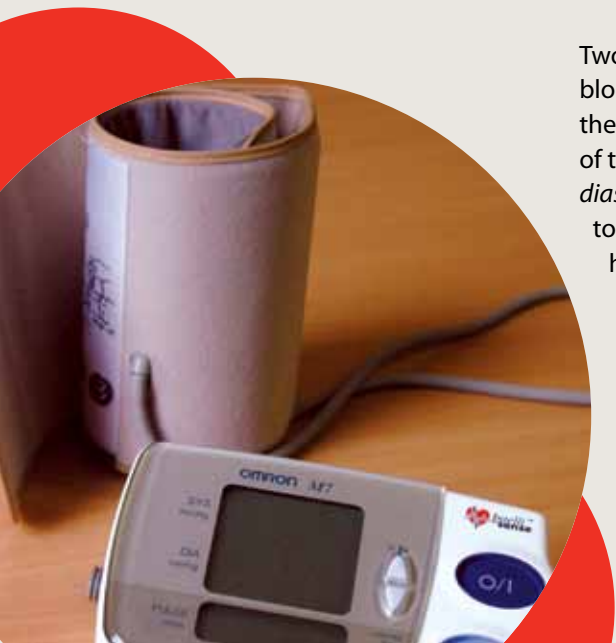
Two measurements will tell you your blood pressure levels: *systolic* - when the heart squeezes the blood out of the heart into the arteries and *diastolic* - when the heart relaxes to let the blood flow back into the heart. A healthy blood pressure is a reading of 120 systolic over 80 diastolic or lower. If your blood pressure is borderline, that is a

reading about 140 over 90, your GP will probably recommend you make some lifestyle changes and monitor the results. These can include:

- Increasing your level of physical activity
- Losing weight
- Quitting smoking
- Eating more fruit and vegetables, while cutting back on salt and processed foods
- Cutting down on alcohol

If you have a reading above 140 over 90, then your blood pressure is high, but you may be unaware of it because you feel well and look well. If your blood pressure is high you may have to take medication, in addition to the lifestyle changes above.

If your blood pressure is high it means your heart has to work extra hard to pump blood around your body.



The Lowdown on High Cholesterol



Dr. Angie Brown, medical director of the Irish Heart Foundation and consultant cardiologist, explains how high cholesterol can affect your health and what you can do to bring it down.

Cholesterol has become a household word and one which is often associated with a need to keep it as low as possible. Yet even today, many people are unaware of their cholesterol levels or how to keep it at a healthy level. Not surprisingly then that the majority of us are at risk – only 18% of people aged over 45 have a healthy cholesterol in Ireland.

People with high cholesterol often have no noticeable symptoms and in some cases, the first sign that something is wrong is when someone has a heart attack. The only way to know if you have high cholesterol is to go to your doctor and have a blood test.

So what do you need to know about cholesterol? First of all, cholesterol is a type of fat naturally produced by the liver. Our bodies need cholesterol for normal cell function, to help digestion and to produce certain hormones. So not all cholesterol is bad.

There are two main types of cholesterol that we routinely measure,

- **HDL (high density lipoprotein) known as the ‘good’ cholesterol and**
- **LDL (low density lipoprotein) known as ‘bad’ cholesterol, because it becomes trapped in the artery walls forming a fatty substance, called atherosclerotic plaque, and causes narrowing of the artery.**

Triglyceride is another type of fat or lipid in our blood and it is also affected by what we eat and drink. Triglycerides can be raised in diabetes, obesity, kidney disease, with an underactive thyroid, too much alcohol and with some drugs. High triglyceride

levels increase risk of heart disease.

When doctors talk of improving cholesterol levels, they mean reducing triglycerides and bad cholesterol (LDL) and increasing the good cholesterol (HDL). A healthy total cholesterol reading is less than 5mmol/l.

There are lots of large studies that show the benefits of reducing your total cholesterol, in particular your bad cholesterol (LDL). The higher the LDL, the higher your risk of heart attack, stroke and problems with blood vessels in your legs. HDL, the good cholesterol, transports cholesterol out of the blood and therefore high levels of HDL cholesterol protects against risk of heart attack or stroke.

Although cholesterol levels can be affected by your family history or genes, your age and diseases such as hypothyroidism, the good news is that it is also very much influenced by lifestyle, which can be changed. For example if you drink a lot of alcohol, have an unhealthy diet, are overweight and are not physically active you are much more likely to have high cholesterol.

So how high is too high?

The recommended target for total cholesterol is no more than 5 which includes a target for bad cholesterol, (LDL), of less than 3. But if you’re in a very high risk group - for instance if you’ve already had a heart attack and/or you have a lot of other risk factors – the LDL target is less than 1.8. If you have diabetes but no other risk factors then your LDL target would be 2.5.

“The higher your bad cholesterol, the higher your risk of cardiovascular disease”

High levels of cholesterol in the blood are caused by too much saturated fat in the diet so tackling your intake of high fat foods can reduce your cholesterol reading over time. (See pages 4 , 8-11)

Cholesterol	Healthy levels mmol/l
Total cholesterol	Less than 5
LDL cholesterol	Less than 3
HDL cholesterol	More than 1

For people with established heart disease or diabetes plus other risk

Total cholesterol	Less than 4.5
LDL cholesterol	Less than 1.8

Know your cholesterol level

Cholesterol levels can change over time or with changes in your lifestyle which is why it is important to have it checked regularly and not as a one-off. Cholesterol readings tend to go up as you get older or as you become less active and more sedentary.

Women particularly need to be aware that after menopause their risk factors for heart disease, especially cholesterol, can increase. (Continued on next page)

How does Physical Activity affect Cholesterol?



Being active on a regular basis reduces your risk of heart disease and stroke. When it comes to cholesterol, being active can increase your HDL (good) cholesterol and may reduce your LDL (bad) cholesterol and triglycerides.

To get these benefits, you need to be regularly active at a moderate intensity for at least 30 minutes five days a week. If you cannot do the 30 minutes in one session, you can build up to it, but each session must be at least ten minutes to get the

health benefits. Physical activity can vary from leisure activities such as walking, cycling, jogging, dancing or swimming to more routine tasks such as gardening, vacuuming or cleaning the house – any activity that gets your heart beating faster!



To lose weight
aim to be active for 60-75 minutes per day for 5-7 days or more than 250 minutes per week.

To keep a healthy weight
aim to be active for 30-60 minutes for 5-7 days or more than 150 minutes per week.

Moderate activity: means you will feel some effort, your heart rate and breathing will increase, similar to a brisk walk.

The Lowdown on High Cholesterol *continued*

If you have a strong family history of high cholesterol you need to know your level and have a regular check up, particularly if high cholesterol is coupled with other risk factors such as smoking, being overweight or obese, diabetes and high blood pressure.

Having inherited high cholesterol, called familial hypercholesteremia, may mean a combination of lifestyle changes and medication known as statins to manage the condition as it may not be possible to achieve a healthy cholesterol level through diet and regular physical activity alone.

There is very strong evidence that statins reduce the risk of heart disease and stroke by reducing LDL and they reduce the risk of cardiac death.

These medicines are therefore used to reduce cholesterol in individuals with established heart disease or in those at high risk of developing heart disease. Though these medicines are beneficial, in some people they can cause side effects such as joint or muscle pain (See page 20).

Preventing a heart attack and stroke

Taking positive steps to improve your diet and to be more physically active on a regular basis is worth the effort because it can lower high levels of cholesterol and can avoid the need for medication in some cases. So, in addition to keeping your cholesterol at a healthy level, it is very good to be aware of other cardiovascular risk factors.

“Stopping smoking improves HDL and lowers LDL cholesterol”

Major risk factors for heart disease and stroke

High cholesterol	Overweight and obesity
High Blood pressure	Diabetes
Smoking	Family history
Physical inactivity	Age

For example, stopping smoking is a good way to improve your HDL and some studies show that cessation can lower your LDL cholesterol, in addition to all the other health benefits.

Making changes today can prevent a heart attack or stroke in the future.

Fat on Food Labels

Food labels can be confusing. Some products list the total amount of fat per 100g in the product while others give a breakdown of the different types of fat such as saturated fat per 100g. Look out for the figure for 'saturates' or 'sat fat' on the label because this tells you how much saturated fat is in a food.

The Irish Heart Foundation's handy Food Shopping Card is designed to help you compare products and choose the healthier option. Just check the amount of fat or saturated fat per 100g of food and compare this figure to the information on the Food Shopping Card. The card will tell you whether the food contains a high, medium or low level of fat and saturated fat. Try to choose the option with the lowest fat content.


	Sugars	Fat	Saturates	Salt
HIGH per 100g	Over 15g	Over 20g	Over 5g	Over 1.5g
MEDIUM per 100g	Between 5g and 15g	Between 3g and 20g	Between 1.5g and 5g	Between 0.3g and 1.5g
LOW per 100g	5g and below	3g and below	1.5g and below	0.3g and below


The amount you eat of a particular food affects how much sugars, fat, saturates and salt you will get from it.



IRISH HEART FOUNDATION
www.irishheart.ie


shopping tips

Most of what you eat and drink depends on what you buy in the supermarket. So making a few small changes to your shopping habits can really help you to eat less fat.

 **Use the Food Pyramid** to help plan your shopping list, checking roughly the number of servings you need. Your list and shopping trolley should contain foods in the same proportion as the Food Pyramid so mostly starchy foods and fruit and vegetables, smaller amounts of dairy, meat, fish and alternative oils and spreads. High fat, sugar and salt foods on the top shelf of the Food Pyramid should take up the least amount of space in your trolley.

 **Compare similar packaged food products** such as ready meals and biscuits by reading food labels. Use the Irish Heart Foundation's handy Food Shopping Card to compare the fat content of foods and try to choose the option with the lowest fat content.

 **Choose lean mince and lean cuts of meat.** Look for skinless chicken.

 **Go for low fat milk, yogurt and cheeses.** Low fat dairy products have just as much the calcium of the full fat varieties and so are just as good for your bones.

 **Look out for special offers on fresh produce** but remember to check 'best before' dates.

 **Try not to shop while hungry.**

 **Go for fresh food as much as possible.**



The
Fats
of
Life

CHOLESTEROL CHECK

If you are diagnosed with high cholesterol, it is not enough to have a total cholesterol result alone. The check should provide a breakdown of your HDL (good) cholesterol, LDL (bad) cholesterol and triglycerides (another type of fat in the blood), as the results can then chart out an accurate plan for your treatment.

- More and more GP surgeries and pharmacists are now able to give a full cholesterol check on the spot. New cholesterol measuring machines give a full breakdown of your cholesterol within minutes from a quick finger prick blood test. You will receive your results and be advised to see your doctor if your results are abnormal.
- However your doctor or practice nurse may take a small sample of

A cholesterol check is a vital and positive step to keep your cholesterol healthy and to prevent your risk of heart disease and stroke.



blood from your arm which will then be sent to a laboratory for analysis. It will take a couple of days for the result to be returned and your doctor will then discuss your results with you and look at your overall risk factors for heart disease and stroke.

If you are diagnosed with high cholesterol your doctor may recommend lifestyle changes to lower your cholesterol and may in some cases prescribe medication. It is most important to follow carefully the dietary advice and if prescribed tablets to take them as advised. Do not stop taking cholesterol-lowering tablets without discussing this with your doctor.

Cholesterol-lowering tablets

Different medicines can lower different fats by different amounts. Cholesterol-lowering tablets are usually taken for the long-term because your cholesterol will only be lowered as long as you take the tablets.

Statins

Statins are the main cholesterol tablets used. They lower cholesterol by reducing the production of cholesterol by your liver. Although one of the main functions is to lower cholesterol, they have other favourable effects on the cardiovascular system, as they can help slow down the build up of plaque (fatty deposits) in your blood vessels and stabilise plaque that is already there.

How and when should I take them?

Follow the instructions on the pharmacy

label. If you are not sure of the instructions, ask your pharmacist.

Side effects

These are usually mild and may include indigestion and headache. Rarely, some people can have liver problems. Because of this, you should have your liver function tested shortly before and after starting the statin and then once a year. For some people joint or muscle pain is a side-effect. If you have these side-effects your doctor may suggest measuring your liver function and CPK (creatinine phosphokinase) which can go up if there is inflammation in the muscle. Sometimes the tablets may need to be reduced or sometimes a different tablet may be suggested.

Other cholesterol lowering drugs

Ezetemibe works by reducing the

amount of cholesterol that your body absorbs from your gut. It is often used in combination with a statin, for example if your cholesterol is still high on a statin alone.

Nicotinic acid lowers LDL (bad) cholesterol and triglycerides (TG), by reducing the amount your body produces. Nicotonic acid is particularly good at increasing the amount of HDL (good) cholesterol in the body. Fibrates are another group of cholesterol-lowering tablets that are particularly good at lowering triglycerides as well as LDL.

Note: Cholesterol-lowering foods cannot replace any medicines you are prescribed. **Never** stop taking your cholesterol-lowering tablets without discussing with your doctor.

The **Irish Heart Foundation** is Ireland's national charity dedicated to the reduction of death and disability from heart disease and stroke. Over 90% of our funding comes from public and business donations. We depend on your goodwill and generosity to continue our work

PLEASE MAKE A DONATION TODAY



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The Irish Heart Foundation is committed to best practice in fundraising and adheres to the statement of guiding principles for fundraising promoting transparency, honesty and accountability.

Any personal information you provide will be held in accordance with the Data Protection Acts 1988 and 2003.

If you found this magazine useful, please help our charity to continue to provide heart & stroke information by donating today.

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By phone: 016685001

By post: Irish Heart Foundation,
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*If you donate €250 in one year (or €21 per month) we can claim tax back at no cost to you.

** Last 3 digits on the signature strip on the reverse of your card.

Preferences

Do you need a postal receipt?: Yes No (saves cost of postage)

Would you like to hear about our events, activities, awareness campaigns and appeals? Yes No

Know the signs of stroke and act **F.A.S.T**



> **FACE**
has their face
fallen on
one side?
Can they
smile?



> **ARMS**
Can they
raise both
arms and
keep them
there?



> **SPEECH**
Is their
speech
slurred?



> **TIME TO
CALL 999**
If you see any
single one of
these signs

What is a Stroke?

A stroke is a 'brain attack' and occurs when a blood vessel, which is carrying oxygen and nutrients to the brain, bursts or is blocked by a clot. This cuts off blood supply to part of the brain which can damage or destroy brain cells which, in turn, will affect how the body functions.

The term 'stroke' comes from the fact that it usually happens without warning, 'striking' the person from out of the blue. The effects of a stroke on the body are immediate.

For example, if a stroke damages the part of the brain that controls limb movement, a person may not be able to move an arm or leg. Some strokes affect the base of the brain and can cause problems with eating, breathing and moving. A stroke can also affect mental processes such as how people feel, think, communicate or learn.



WHEN STROKE STRIKES ACT **F.A.S.T**



**IRISH HEART
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Fighting Heart Disease & Stroke

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