Chapter 15

# **Chemical Sensitivity**

This problem seems to be increasing. You only have to consider the vast array of products made from petrochemicals (hydrocarbons) which have become part of twentieth-century living, to see that we cannot possibly expect humans to have adapted to them in such a short time.

Rachel Carson's classic book *Silent Spring*, written back in 1962, was a chilling forecast of the price we may have to pay for tampering with the environment. Talking about the effect of DDT and other pesticides on living creatures and food chains, she said, 'It looks as if we will go on swallowing these chemicals whether we like it or not and their real effect may not be seen for another twenty or thirty years'.

Most M.E. people seem to have an increased degree of sensitivity to chemicals compared to when they were well, and chemical allergy goes with food allergy. Some reactions are obvious: for example, someone who gets a headache and watering eyes when they open the morning newspaper is probably sensitive to printer's ink. However, there may be more insidious symptoms, harder to relate to their cause. Someone who is very sensitive may be unwell on days when the wind blows from the direction of some chemical factory 30 miles away. The presence of a smoker in the household may cause chronic worsening of symptoms in a susceptible non-smoker. A minute gas leak from an old cooker can make you ill.

Other than moving to a remote place by the sea, drinking spring water and growing your own food organically, you may feel that you have little control over your environment. You can, however, support pressure groups such as Friends of the Earth, Greenpeace, or write to your Member of Parliament about environmental issues. Nearer to home, there is a lot you can do to clean up your immediate environment.

# **Chemicals that Cause Problems**

#### Hydrocarbons, or Fossil Fuels

Petrol, diesel, oils - (from cars and trucks, boat engines) Paraffin (kerosene) - as used in kerosene stoves Natural or Calor gas - (from central heating, gas cookers) Coal, coke, anthracite - (coal-fired stoves, open fires) Wood, charcoal - (wood smoke, barbecues, stoves)

#### Hydrocarbon Derivatives

People who are sensitive to the things listed above are usually also affected by hydrocarbon products:

Plastics - wrappings, bottles, clingfilm, plastic food boxes, plastic furnishings

Synthetic textiles - nylon, terylene, dralon, polyester, in clothing, carpets and upholstery Paints, varnish, solvents - as found in newly-decorated buildings Aerosol propellants - these are numerous and widespread, being found in hair spray, deodorants, insect sprays, air 'fresheners', etc. Detergents, polishes, and cleaning fluids Cosmetics, perfumes, scented soaps, and wax candles

# **Phenol Products**

Carbolic acid - this is pure phenol Dettol and other antiseptics Many preservatives Pesticides, herbicides Polyurethane foam Dyes Bakelite and hard plastics

# Formaldehyde

Found in dyes, fabric finishes, and proofings in textiles (if you feel unwell in a large clothing store, it is formaldehyde affecting you)

Traffic fumes Fertilizers, insecticides, foam rubber Fabric conditioner Paper manufacture, printing ink, photography Most building materials, cavity wall insulation Many other products

# Gardening and Agricultural Chemicals

These are too numerous to list. Many are now banned, but can still be found lurking in garden sheds. They include herbicides, which kill unwanted plants, although they usually break down quickly.

Fertilizers may be safe for plants if diluted, but may be toxic to us while undiluted.

Pesticides are potentially the most harmful. DDT, although banned, builds up in food chains and has been detected even in the Arctic ice, it is now so widespread. Organophosphates kill insects by interfering with their nerve function. They are probably the lethal component in chemical bombs, such as those used in the massacre of a Kurdish community in northern Iraq. Some humans are very susceptible to even traces of organophosphates, and sheep farmers in particular are at risk as a result of skin contact with sheep dip. Symptoms of organophosphate poisoning can linger for years, and may resemble M.E. - headaches, muscular weakness and exhaustion, nausea, sweating, loss of co-ordination, loss of cognitive brain function, etc. The main sources of exposure, if you are not a sheep dipper, are household insect sprays or being near crop fields that have just been sprayed.

# Food Colourings

The following foods usually have synthetic colourings:

Glacé cherries, coloured ice creams, sweets, lollipops Orangeade, lemonade, fruit-flavoured drinks Yellow cheeses, coloured cakes and icing Canned soft drinks Many processed foods

The correct procedure is to check the label when buying foods. The items listed above should be avoided by people with M.E. anyway.

#### **Colourings in Medicines**

This source of potential trouble is easy to overlook. Many medicines are still coloured or flavoured with synthetic chemicals, some of which are banned in countries other than the UK. If a medicine you really need is suspiciously coloured, your pharmacist should be able to enquire of the manufacturers what the contents are.

# Chemicals in Tobacco Smoke

You need not be a smoker to be affected by the fumes from other people's cigarettes, pipes or cigars. This smoke contains many chemicals, and a sensitive person can even be affected by traces lingering on clothes. If you or someone near you smokes, then avoiding all the other sources of chemical pollution may be a waste of time. You are entitled to a smoke-free place at work, and *you must make your home a smoke-free zone if you are serious about improving your health*.

# Minimizing Chemical Pollution On Your Person

Wear natural fibres if possible. Avoid fabrics with special finishes, and clothes that have to be dry-cleaned - or at least air them well after they've been dry-cleaned. Make sure the washing is well rinsed, use soap powders or flakes or ecologically safe detergents; avoid fabric softeners. When buying clothes, look for cottons, pure wools, or silk, and if a garment has any odour don't buy it, or wash it several times before wearing it. Cotton/terylene mixes are better than pure nylon.

Do not use perfume, aftershaves, deodorants, scented soaps or talcum power, or synthetic bath bubbles. Avoid hair sprays and scented shampoos.

Women wearing make-up should use natural products, such as The Body Shop range and similar. Transforming a M.E.-ravaged face can be morale-boosting!

# In Your Home

### You and others around you must not smoke.

In the bathroom, remove air fresheners, toilet deodorizers, and all cleaning agents. The bath and WC can be cleaned with the least smelly agents possible, and these can be kept in a cupboard somewhere else, or outside. It is a myth, fostered by advertising agencies, that artificial smells of 'pine' or 'meadow freshness' equal hygiene. Women brought up during a less chemically-inclined era will remember that bathrooms could be kept clean without all these smells.

Look under the kitchen sink, and see what cleaning agents you can jettison. Those you decide to keep, such as ecologic washing-up liquid and sink cleaner, keep tightly sealed. Spray furniture polish, instant floor cleaners, insect killer or fresh air sprays should all go out. In summer, old-fashioned sticky fly-paper can be quite efficient at keeping down flies. There is little that cannot be cleaned with water, soap, or bicarbonate of soda, and the best air freshener is an open window. It is better to have a grubby home than a shiny, scented house with ill occupants.

Paints and solvents should be stored outside, in the shed or garage. Plans for redecorating should be postponed until you are either better or can go away while it is being done and not return until the smell has cleared.

It is probably not practical to rip up all wall-to-wall foam-backed carpets, but if you are chemically allergic it might be worth taking up such a carpet from your bedroom and keeping just the old linoleum that may be underneath, or having bare floorboards with woollen rugs or carpets that can be shaken outside. Another benefit of bare floors is a reduction of house dust; fitted carpets can never be properly cleaned, and they also harbour house dust mites, a cause of asthma.

Very sensitive ill people find benefit from creating one room in the house which is as chemical-free as possible - a 'safe haven', with natural cotton curtains, no plastics, no treated furniture, no foam, and no treated wallpaper. Many modern wallpapers are treated with fungicides, and cause trouble for some time.

If you are replacing furniture, try and avoid foam-filled furnishings with synthetic or imitation leather covers. Basically, anything new or that smells is likely to be chemically treated. The best furnishings are of wood or metal, with cotton or wool covers, and kapok (a cotton-like material) cushions.

One problem area is the bed. Should you have feather or foam-filled pillows? Goodquality feather pillows are better, provided you are not allergic to feathers. A lot of the allergic reactions to beds and bedding is due to the ubiquitous house dust mite, which establishes itself in all soft furnishings. Covering the mattress and pillows with finely woven cotton ticking helps. Washable wool or cotton blankets can be kept free of dust mites, and the best duvet would be feather-filled but also washable.

On the subject of house dust mites, vacuum cleaning can bring on symptoms. There are cleaners that can connect to an outside vent so that dust is not recycled into the room.

In the kitchen, avoid plastic food containers, bags or clingfilm. Greaseproof paper is better for wrapping.

Cooking utensils should be of stainless steel, pyrex, cast iron or enamelled ware. Aluminium pans are bad for anyone, as aluminium is poisonous and small amounts enter cooking food, especially stewed fruit. The non-stick linings of pans' may seem convenient, but the chemicals they contain can contaminate your food. Also, when the non-stick surface deteriorates the food sticks and burns far worse than on an ordinary pan.

More difficult to get rid of in your home is a heating system that might be releasing minute quantities of fumes that are affecting you; nor may it be easy to find out whether the heating system is the true culprit. Most people in urban areas of the UK have North Sea gas heating - it is worth having your appliances thoroughly serviced regularly and tested for leaks. A gas cooker is relatively easy to replace with an electric one, as gas cookers are common sources of minute traces of gas, leaking from the pilot light.

One way to test if gas is causing a problem is to go and stay somewhere with no gas at all and see if you improve. On returning, if you can smell any trace of gas at all, you are probably sensitive to it. Most modern appliances give little trouble. Alternatively, you can switch off the gas at source for two weeks, ventilate the house well, and then see if any symptoms return when it is switched on again. This test may not be so clear as going away, as traces of gas persist from pipes and connections.

Many M.E. sufferers seem to get worse in winter. I wonder if being indoors most of the day with central heating and lack of ventilation is as much to blame as is lack of sunshine and daylight? Indoor pollution is worse than outdoor pollution, unless when you step out the door you are faced by a busy road, or a chemical factory. At least outdoor pollution gets blown away sometimes by a good wind. A lot of people never open any windows in the house, for fear of burglars or losing heat. But even in winter, each room should be ventilated once a day for a while, especially on windy days, when the outside air is cleaner.

Other sources of indoor pollution are wood preservatives, certain cavity wall insulations (foam), tobacco smoke, damp and mould (adequate ventilation should prevent these), portable gas heaters, coal- or oil-fired stoves, and insecticides, as well as air-conditioning units and integrally-built garages.

Televisions and VDU screens, when in operation, give off formaldehyde from their plastic components. They may also produce electromagnetic and other radiations, which are harmful to M.E. sufferers, and indeed to everyone. This may be why so many M.E. people cannot tolerate exposure to much television. One person commented that he had the same ill effects by sitting in front of a TV with his eyes blindfolded as he had if he watched the programme. His symptoms were headaches, increased mental 'fog' and blurred vision for up to 24 hours after exposure to TV for any length of time.

A solution for users of computers, whether at work or at home, is to attach a special screen which blocks off the harmful rays. An ionizer in the room also seems to help.

A fairly drastic step is to move house, if there seems to be something harmful in your home or neighbourhood that cannot be corrected. Obviously there is no point in giving up a home with gas heating only to move to a quiet country cottage surrounded by crop fields which are regularly sprayed! So, if such a step is taken, it is important to look for somewhere with electric heating, or a boiler well away from the house, in a relatively unpolluted area away from busy roads.

With smoke-free enforcement in most cities, urban air may be cleaner than in some parts of the countryside, as mentioned above, if you can find a quiet area with plenty of greenery. Old houses may be unsafe because of treatment for timber and dry rot. Probably the best homes ecologically (in the UK) are those built between 1920 and 1960.

# **Combating an Acute Reaction**

Drink a glass of water containing one gm of vitamin C and one level teaspoon of bicarbonate of soda. Repeat the vitamin C if necessary, at hourly intervals, and continue to drink lots of fluids for 24 hours. This helps to neutralize the reaction, and gives a boost to the white cells and adrenals. Whatever the mechanism, this remedy does help, so keep vitamin C handy at home and if travelling. This mixture is useful to take on aeroplanes - air travel involves chemical exposure both on planes and in modern airport terminals.

At home, change your clothes and have a shower, to remove traces of the chemical from your clothes and skin. Go outside (if inside), or open a window and breathe deeply of clean air. If in a car, shut all windows and vents, and try and get away from whatever it is - crop sprays, road works, or a queue of buses. Bach Rescue Remedy drops are invaluable, and can be taken for any sort of collapse or shock, whether chemical, emotional or sheer physical exhaustion. Together with glucose sweets, and some vitamin C and bicarb, a small bottle of Rescue Remedy should be part of every M.E. sufferer's first-aid kit. I have found all these things essential on occasions when travelling, when one's expectations of endurance tend to far exceed reality.

# Desensitisation

Some clinical ecologists treat very chemically-sensitive patients in a special ecologically safe unit, where everything is done to create a chemical-free environment. Patients often improve dramatically while in these surroundings, and can return home with a supply of desensitising drops or injections.

This is fine, so long as the patient also takes steps to clean up his or her home as much as possible, to deal with any likely Candida infection, and to correct any nutritional deficiencies. But chemical sensitivity will return after a time, unless the underlying immune dysfunction improves. Avoidance of all possible allergens will help the immune system, and so should be attempted by M.E. sufferers as part of their self-help plan.

The following history is of someone who found chemical avoidance helpful. It also illustrates that many health workers still do not understand the symptoms of M.E.

Mrs L. C., aged 28, Ex-hairdresser.

Her illness started in 1982, suddenly. She has been ill since then.

'I believe long-term exposure to chemicals at work - hairsprays, perms, bleaches etc. - whittled away at my immune system over the years; then in the year previous to the onset I was working long hours. So when I went down with the infection it was severe, and I think my powers of recovery were not a quarter of what they should have been.

'My symptoms were, and are: feeling very ill, muscle weakness and pain, strange sensations in my head, pain in all my muscles, especially in my thighs, excessive perspiration, giddiness, cold feet and hands, wheezing, palpitations, pain as though I had "acid" coursing through my veins.'

Mrs C. had a muscle biopsy and blood tests done two years after the onset; the muscle biopsy was abnormal, and the diagnosis was myalgic encephalomyelitis. She also had myocarditis three years ago. She has been virtually bedridden and permanently fatigued for most of the last five years. During the last year there has been some improvement, however:

'Ridding my -home of all chemicals has produced a dramatic improvement. After being totally collapsed and bedridden for over a year an M.E. sufferer, also a patient of Dr Jean Monro, told me to move house and clear out at least my bedroom of all allergens or I would be bedridden for the rest of my life. It made sense. My ex-home had been totally renovated and sprayed with fungicide (for dry rot) and pesticide (for woodworm). Also I lived in a top-floor flat on a busy road, my carpets were foam-backed, the furniture was chipboard and hardboard. I surrounded myself with perfumes and spent a fortune on bath oils and foams. We were advised to buy a home which was 15-to-20 years old (any older and it would most likely have been sprayed and damp-treated),

'We lifted the carpet in the bedroom of our new home, and luckily there were creamcoloured, hard vinyl tiles underneath which cleaned up well. We use all 100 per cent cotton sheets and night attire, and got rid of our modern furniture. I gave away all my perfume, and now buy *Simple* toiletries. I'm phasing out my clothes, which are made of synthetic fabrics. I don't allow anyone to smoke in my house, and I ask friends and family not to wear perfume, aftershave, or hairspray when visiting.

'A friend was wearing hairspray when visiting recently. I didn't like to say anything at first, but after 1½ hours I went from being able to sit quite easily to collapsing and unable to hold myself up - I could hardly believe the effect it had on me! After she'd gone it took two hours for the air to clear with the door open - when it did clear and I had gulped in lots of fresh air I could sit once again.

'I would advise all bedridden or severely affected people to take the same advice, remembering all family members must switch to unscented toiletries.

'In June of this year I had a dreadful experience. I was horrifically unwell and living with my

parents, as we had just sold our flat. My husband had just started his new job and was in agony with three slipped discs in his back. I was totally incapacitated and unable to wash myself or get to the toilet unaided. In desperation I wrote to Dr X. at -- Hospital, and they took me in. I was carried out on a stretcher, as I couldn't sit or stand. The first day wasn't too bad, except the nurses wanted me to walk a very long corridor to the toilet - it was agony, I couldn't hold myself up.

'I tried to explain that I couldn't sit up in bed for my meals, yet they wanted me to sit at a table. The staff could see how disabled I was because they had trundled me away in an ambulift for a bath, in which I just slumped, totally unable to move. On the third day they wanted me to go to the gym for physiotherapy. I tried again to explain how terribly ill I felt, and that I couldn't even sit up. I felt sucked to the bed like an iron filing to a magnet.

'It was the last straw when the nurse said to me at lunchtime "Do you *want* to sit at the table?" I just lost control, and screamed at her in floods of tears, and told everyone of them that I was not trying to be uncooperative, that I was not a lazy creature who enjoyed lying in bed. The doctor called me selfish, and said I had an abnormal attitude and that the reason I had been bedridden for over a year was because I had put down "clamps" and was afraid of trying. I realised just how much this research hospital knew about M.E. Nothing.

'I just want to forget it all now and concentrate on getting better, which I feel quietly confident about. I believe our healing to a large extent comes from within ourselves, and that self-help should mean exactly that. I have kept a diary since I've been ill, and have come to a number of conclusions about this illness which I am trying to get down on paper, hoping to help others.

'Things which have helped me include relaxation tapes, home-help (I had over 25 phone calls in response to advert!), my personal stereo (ideal for listening to relaxation tapes, etc. when bedridden), massage - various books available - and meditation, hot baths (but not *too* hot) - helps inflammation and vein pain, fresh air - as much as possible, Christian counselling - ask at your local Christian bookshop for this service (good for Christians and non-Christians alike), and Christian healing - local church prayer groups usually have a healing ministry. Also the book *Chemical Children*, which is about chemical avoidance.'

#### **Suggested Further Reading**

Rachel Carson, Silent Spring, (Penguin, 1962, Pelican, 1983).