

SMOKING

If beetroot and rhubarb, just for instance, were found not only to cause cancer in 10% of their heavy consumers, but eventually to bring 25% to an early death, no-one would consume them, and the government would long ago have legislated against growing them. Sadly, this is just what cigarette smoking does, but the sale of cigarettes is permitted, cigarettes have been heavily promoted by advertising, and large profits are made from their sale.

Over the centuries, since the introduction of tobacco to Europe in the 1590s, more and more people have become addicted to nicotine. Women started smoking in public only during the First World War, and the habit reached a peak during the Second World War when 75% of the adult population of most western countries were smokers. When today's grandparents were children, they were warned against smoking because "it stunts the growth" (something it only does to the babies of smoking mothers), but generally it was not regarded as harmful, at least for adults. Cigarettes, cigars, lighters, pipes, ashtrays, etc., were standard gifts at Christmas and birthday for a generation. Vast factories poured out billions of cigarettes that were made, packed, wrapped and boxed untouched by human hand. Multinational tobacco corporations gained enormous profits, and became powerful friends of government as tax payers and revenue earners. Governments even subsidised the growth of tobacco in some areas.

Then came the crunch. It was found that smoking tobacco killed people. There was a long delay, and more than half the smokers escaped, but there was little doubt about it - for many people smoking was lethal.

Nicotine is a very powerful and toxic substance, which acts initially as a stimulant on the central nervous system, but this effect is followed by a reduction of brain and nervous system activity. Nicotine causes narrowing of blood vessels, which then affects the circulation and causes blood pressure to rise. This is why regular absorption of nicotine through smoking can cause chronic heart problems and increases the possibility of heart attacks. In addition to nicotine, tobacco smoke contains many other chemicals, which are harmful, including tar and carbon monoxide. Tar released in the form of particles in the smoke is the main cause of lung and throat cancer in smokers and also aggravates bronchial and respiratory disease.

We now know that 11% of smokers will get lung cancer, and 90% of these patients will die. Coronary heart disease will kill many prematurely. Chronic lung disease will cripple a large proportion of the remainder. Women smokers have an increased risk of cancer of the cervix.

Smoking is known to increase the incidence of a wide range of medical problems including:-

- lung cancer
- heart attacks
- angina
- emphysema
- chronic bronchitis
- asthma
- cancer of the cervix
- depression
- strokes
- high blood pressure
- bladder cancer
- throat cancer
- tongue cancer
- oesophageal cancer
- kidney cancer
- pancreatic cancer
- small and sicker babies of pregnant women
- sinusitis
- viral and bacterial infections of the throat and lungs (eg. influenza, tonsillitis)
- poor circulation to feet and hands (Buerger disease)
- pneumothorax
- mouth ulcers
- peptic ulcers
- reflux oesophagitis
- suicide

It also alters the actions of many medications from beta-blockers to asthma inhalers. Many of the effects above may affect not only the smoker, but also those who live and work with smokers (passive smokers).

Cigarette smoke contains hundreds of chemicals. Amongst the worst are:-

<u>CHEMICAL</u>	<u>MAY CAUSE</u>
Tar	Cancer
Carbon monoxide	Suffocates and blocks oxygen uptake
Nicotine	Stimulation and addiction
Aromatic hydrocarbons	Cancer
Phenol	Tissue irritant
Arsenic	Poison
Carbazole	Accelerates cancer growth
Hydrocyanic acid	Cancer
Acetaldehyde	Slows function of cilia (fine hairs) in airways
Ammonia	Tissue irritant
Nitrosamine	Cancer
Formaldehyde	Stops phlegm clearance from airways
Indole dyes	Accelerates cancer growth
Vinyl chloride	Cancer

If governments actually recorded these substances officially, they would have to ban the sale of cigarettes, as no other product that contained these substances would be allowed on the market.

The medical facts are conclusive - smoking is the biggest health problem in the Western world. It contributes to more deaths than alcohol and illicit drugs together, and costs the economies of these countries millions of dollars a year. If nobody smoked, there would be 30% less cancer.

SMOKING BEHAVIOUR	YEARS OF LIFE GAINED - MEN	YEARS OF LIFE GAINED - WOMEN
Never smoked	10.5	8.9
Quit aged 35	8.5	7.7
Quit aged 45	7.1	7.2
Quit aged 55	4.8	5.6
Quit aged 65	2.0	3.7

Compared with lifelong smokers.

Smokers just can't win in any way. In a Boston study smokers were found to have 50% more traffic accidents and 46% more traffic violation convictions than non-smokers.

SMOKING IN PREGNANCY

There is no doubt that the babies of mothers who smoke are smaller (by 200 g on average) than those of non-smoking mothers. There is also an increased rate of premature labour (delivering the baby too early), miscarriage and stillbirth in these women. After birth, babies of smoking mothers continue to suffer both directly and indirectly from their mother's smoking. The smoking by the mother appears to reduce their resistance to disease, in particular to infection, so that babies born to smoking mothers die in infancy more often than average. By inhaling the smoke from either of their parents, these infants have more colds, bronchitis and other respiratory problems than babies in non-smoking homes.

Any woman who smokes should ideally cease before she falls pregnant, but certainly should do so when the pregnancy is diagnosed. This is far easier said than done, but if her partner stops at the same time, support and encouragement is given by family and friends, and assistance is obtained from the family doctor, women who are motivated to give their baby the best possible chance in life will succeed in kicking this very addictive habit.

SMOKING CESSATION

Smoking addiction can be divided into two components - addiction to nicotine and habit. Those who are addicted will find it harder to stop than those who merely smoke out of habit. Usually it is not just addiction or habit, but a mixture of the two.

Addiction is characterised by:-

- desire to smoke immediately on waking
- difficulty in not smoking in places where it is forbidden
- smoking larger quantities of cigarettes
- smoking more often in the first two hours of each day

- smoking despite being ill
- becoming depressed if unable to smoke

Before anyone can stop smoking, they must really want to stop. No one who is half-hearted about wanting to stop will ever succeed. Once you have decided to stop, set a time and date for the event. Tell everyone you know of your intentions, and take side-bets if you can to reinforce your incentive. Make lists of reasons why you must stop, and leave them everywhere at home and at work. Make sure that from the moment you stop, you have no cigarettes available to you, and resist the temptation to buy or beg for more. Start a savings account with the money you save by not smoking, and if you don't succeed, pay the balance to the Cancer Fund! Nicotine-containing gum or patches can be used to ease the craving for cigarettes.

If these incentives are not sufficient, see a doctor. They can prescribe a medication (bupropion) that can reduce the craving for nicotine. Group therapy sessions, hypnotherapy, psychological counselling, support groups, rewards at the end of each successful week and reinforcement visits to a doctor can all help win the fight. Antidepressant medication may be useful in smokers who are very addicted.

At present, 26% of the adult population in Western Europe smokes, but this figure is decreasing every year. The lowest rate of smoking in the world is in Australia where less than 18% of adults indulge, but two out of three smokers in Australia are women. In 1945 75% of Australian males smoked and 26% of females, demonstrating how much has changed in the past 60 years. It will soon become so antisocial that it will only be permitted for consenting adults in private!

In developing countries smoking is seen as a status symbol - the smoker can afford to burn money - and smoking rates of over 70% are found in countries like Turkey.

SELECTED NATIONAL SMOKING AVERAGES

<u>COUNTRY</u>	<u>% SMOKERS</u>
Australia	17
Hong Kong	19
Singapore	19
New Zealand	22
Sweden	23
Malaysia	23
Belgium	25
USA	25
Portugal	27
Ireland	28
United Kingdom	28
Canada	29
Thailand	29
Italy	30
Netherlands	33
Norway	35
Spain	36
Denmark	36
Greece	37
Japan	37
Korea	38
Poland	40
Bangla Desh	45
Russia	48
China	60
Turkey	71

PASSIVE SMOKING

Almost everyone is forced to inhale fumes containing toxins such as formaldehyde, acetone, arsenic, carbon monoxide, hydrogen cyanide and nicotine at some time. You have no choice in the matter and have to suffer the consequences, because these chemicals are just a few of the scores of irritants found in cigarette smoke. Fortunately for most of us, the result of passive involuntary smoking is only a minor itch of the nose, a cough or a sneeze, but some people can develop life-threatening asthma attacks or have their heart condition aggravated by inhaling tobacco smoke. Being trapped in a vehicle or other enclosed space with a smoker can be a nightmare experience for such

people. In some situations the non-smoker may be more affected than the smoker, because the smoke coming directly from a cigarette contains more toxins, nicotine and carbon monoxide than that inhaled by the smoker, which has been more completely burnt and passed through a filter.

The most unfortunate victims of passive smoking are the children of smokers. The incidence of pneumonia and bronchitis and the severity of asthma in children whose parents smoke are far higher than in the children of non-smokers. In babies of women who smoke, health problems caused by passive smoking begin before birth (see above).

In the workplace, more and more offices are becoming smoke-free zones. Unfortunately some people still smoke at work, and if their subordinates have adverse reactions to passive smoking, they may have to put up with it or change jobs. This situation may change in the future, as more and more workers are successfully claiming workers compensation payments for complications of passive smoking at work.

The non-smoking spouse or partner of a smoker is also at great risk. They have a significantly increased risk of lung cancer, reduced lung capacity, a higher incidence of asthma, and more respiratory infections than those whose spouses or partners do not smoke.

Smokers should now be aware of the health risks that they are taking every day, and they can no longer claim personal freedom to smoke where and when they like, as their habit is adversely affecting the health of those around them. All smokers should have the courtesy to only light up when there is no possibility of others inhaling the resultant toxic fumes. Legal suits by passive smokers against smokers for causing bodily harm have been successful in the United States.

DISEASES CAUSED BY SMOKING

As well as slowing wound healing after injury or surgery, there are many diseases that may be caused or aggravated by smoking including asbestosis, amblyopia, aneurysm, angina, asthma, bronchiectasis, bronchitis, Buerger disease, cataract (post-nasal drip), cervical cancer, common cold, cor pulmonale, emphysema, histiocytosis X, high cholesterol, hypertension, laryngitis, laryngotracheobronchitis (infection of airways from throat to lungs), Legionnaire's disease, lung cancer, mesothelioma, mouth cancer, oesophageal cancer, osteoporosis, peptic ulcer, pneumoconiosis, pneumonia, reflux oesophagitis, sleep apnoea, snoring, tachycardia, talcosis, thrombosis and many others.

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