

# BETTER WAYS TO STAY HEALTHY IN ASIAN TROPICS

- with special reference to Sri Lanka

*"You become what you think you will"*



Bryan Walker BSc MSc PhD CBiol FIBiol  
Kalpana Patel MBBS BEng MSc

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"Damp with dirt leads to disease  
Flies are awful; so are fleas  
If you want to stay healthy  
Apply this advice  
The consequences of otherwise  
May not be very nice"

- BW

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## PREFACE

This booklet is intended to help visitors to the Asian tropics stay healthy by adhering to simple guidelines. Short-term visitors will not want to afford time being sick; longer-term aid workers and volunteers become a burden instead of a bonus if their health fails. Humanitarian organisations may like to add this booklet to the briefing pack of those planning a visit to tropical Asia to optimise the efficiency of their teams.

Feel free to copy all or part of it for training purposes.

If you have any comments or feedback, please contact the authors ([walkerun@gmail.com](mailto:walkerun@gmail.com)). In particular, we would like to know your views on:

- the length of the document
- the difficulty of the language used
- if more/less illustrations would be helpful
- other possible topics for future books

## Further Information

- a. Dawood, R (2002) Travellers' Health: how to stay healthy abroad. (Oxford University Press). ISBN 0 19 262947 6. This is the ultimate reference for going abroad, travelling/working and returning healthily. Its 700 pages may be too bulky for a short visit, but it is an essential component of the longer term traveller's library. Look at the web site [www.travellers-health.info](http://www.travellers-health.info).
- b. Lancaster, T (2006) The Traveller's Good Health Guide (InterHealth). ISBN-13: 978 0 85969 991 4. The essential health guide for backpackers, travellers, volunteers and overseas workers.
- c. Sugathapala M and Walker B. (2010) Having Healthy Babies: an educational Snakes and Ladders game. (Good for a workshop). Download it free from [www.networklearning.org](http://www.networklearning.org).
- d. Walker A, Walker B and Walker R. (2009) A Guide to Voluntary and Humanitarian Work. Download this and other documents from our web site [www.networklearning.org](http://www.networklearning.org).
- e. Wise, M (2002) The Travel Doctor: your guide to staying healthy while you travel (Firefly Books). ISBN1 55297 668 8. It includes tips on jet lag, altitude sickness, culture shock, parasites and travelling with a medical condition.
- f. Books can be found and obtained through Amazon [www.amazon.com/books](http://www.amazon.com/books).
- g. You may need to update and extend your immunisations. Country details can be found on several sites e.g. [www.fitfortravel.scot.nhs.uk](http://www.fitfortravel.scot.nhs.uk), or [www.mdtravelhealth.com](http://www.mdtravelhealth.com) which provide much additional information on individual country health hazards.
- h. You can shop online for many items needed for travel and have goods delivered from InterHealth (157 Waterloo Road, London SE1 8US. Tel: 020 7902 9000. Email: [info@interhealth.org.uk](mailto:info@interhealth.org.uk), [www.interhealth.org.uk](http://www.interhealth.org.uk)). The centre also gives immunisations by appointment.

## HEALTHY IN ASIAN TROPICS

### AIM

- To allay fears and to develop a positive approach to healthy living in Asian tropics

### OBJECTIVE

- To provide practical approaches to avoiding illness and keeping healthy

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## 1. Introduction

These guidelines are intended for expatriate tourists, volunteers and humanitarian workers who are visiting tropical Asia or Sri Lanka in particular. They will also be useful to local urban residents who are moving to rural and less developed areas for prolonged periods of time. The booklet is not intended to provide a therapeutic solution to serious illness. It gives advice and information that will help you to keep healthy.

The authors have lived and worked for many years in Africa, India, Sri Lanka and elsewhere in Asia. So the hazards mentioned in this document are based on real experiences of living in rough and rural areas. Every effort has been made to make sure that the contents of this book are in accordance with modern medical practice. For the benefit of those who will not read the whole document, some general advice is given in Section 7 with more practical details in Section 9. However, in the search for simplicity, much detail has been omitted. Hopefully this approach will make the information easily available to the lay reader. Further information sources are given at the front. Neither of the authors can accept any responsibility for health problems that may arise from the application of the information provided.

So this booklet is not for the advanced student. Nor is it a substitute for professional clinical advice when sickness causes inconvenience or incapacitation. If readers experience health problems, hopefully they will gain a better understanding of both their illness and treatments should the former still emerge after taking all possible precautions.

## 2. Background Information About Sri Lanka

Sri Lanka is a typical tropical country. There are wet and dry seasons, but the picture is complicated by the fact that there are two monsoons:

**May to August** - the south-west monsoon brings rain to the southern, western coastal regions and the central hill country.

**October to January** - the north-east monsoon rains on the opposite side and also across the hilly area. Kandy, at a higher altitude, catches both and so it is almost always lush, and cooler than Colombo.



Geology, geography, latitude, climate and biological history combine to make Sri Lanka tropical. This has implications for health; all the diseases of the West are here with tropical diseases as well! The main causes of sickness and death are diarrhoea, respiratory infections, dengue fever, diabetes and

malaria (but not as much now as earlier). The bright side is that, for nature lovers, the biodiversity here is among the richest on the planet.

The country is divided into wet and dry zones. Colombo, Kandy, Galle form a triangular wet zone from which malaria is generally absent: the rest of the country is dry and formerly malarious (bet you thought it would be the other way round!). Now the risks are far less. But avoid being bitten by using impregnated bed nets, light coloured clothes that cover arms and legs especially in the evenings, insect repellents (DEET, or Citronella which is not as long lasting), mosquito coils or mats, and keep taking any tablets your doctor ordered. Nevertheless, in spite of the additional risks to health, the expectation

of life in Sri Lanka (early seventies) is said to be almost the same as that of the UK (late seventies). Based on a little science and a lot of common sense, you can be as healthy here, if not healthier, than you could be in a temperate climate.

*"Since both in importance and in time, health precedes disease, so we ought to consider first how health may be preserved, and then how one may best cure disease"*

**Galen 131-201 A.D.**

### **3. The Positive Side of Living in Sri Lanka**

There are several, in fact:

- You will, could, or should eat a healthy diet. No more junk food for you (although it is increasingly available). Everything is available fresh. And plenty of roughage in a variety of fruits, nuts and vegetables.

- Whether you like it or not, you will get plenty of exercise. Just travel on a bus from north to south Colombo and you will get a full workout for just a few rupees. Even if your purse is stolen on the journey it may come cheaper than a weekend at a health farm at home.

- Few of the western allergens are here. If you suffered from hay fever, nettle rash, or just allergy to work there; those conditions are hardly to be found in Sri Lanka. But seafood and other allergens exist here as elsewhere.

- Your body contains mechanisms for resisting infection. Your intact skin acts as a physical barrier. All your body secretions contain antibiotics or bacteriostatics (naturally-occurring substances that stop bacteria reproducing) in one form or another (AbG, lysozymes etc - but don't worry about the names). Your diet contains chillies (i.e. capsicum) that stimulate an increase in all your secretions. After every meal your nose will run, your eyes will stream, your mouth will salivate, and phlegm production throughout your airways will increase millions. Three times a day your pipes get a thorough flushing, which zaps microbes by the zillion! (But capsicum itself is not antibiotic, so don't rely on it or any other spices to sterilise your food).

- The air is clean in most parts of the country (although not everywhere, especially in the traffic-polluted bigger towns)

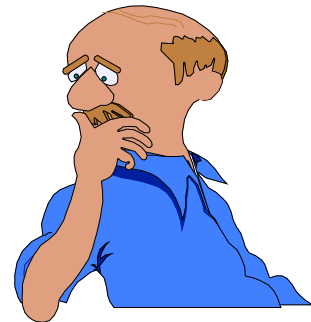
- In many respects you can have less stress than you had before. If you live a simpler life style there will be less to worry you.



Of course there are additional health hazards here, but overall the balance is in your favour. Outstandingly there is poverty, which can lead to imbalanced diet, and malnutrition, which take their health toll in a country with suicide and attempted suicide rates among the highest in the world, as well as a history of civil war in the north-east. Thankfully the humanitarian workers and travellers are generally spared these problems. The legacy of war, however, demands attention to personal security.

But we must put all this in perspective - the above information relates to the general population who lack the common sense and scientific knowledge so abundant in yourselves! Moreover, some tourists indulge in relaxed attitudes and reduced inhibitions that can lead to an unhealthy lifestyle. Such behaviour is never seen among humanitarian workers in tropical Asia!

#### 4. So What Are We Worried About?



A poll of the worries of forty VSO volunteers in Sri Lanka (1997) brought the following to light:

- Snake bite	10
- Malaria	9
- Traffic accidents	9
- Dengue fever	8
- Bus and bus drivers	3
- Lack of available blood for transfusion	3
- Millipede bites	3
- Amoebic trouble	2
- Centipede bite	2
- Hospitalisation	2
- Appendicitis	1
- Constant stomach upsets	1
- Contaminated water	1
- Injury	2
- Scorpion sting	2
- Dental treatment	1
- Environmental factors affecting development of babies (mosquito coils, water, air, chemicals in food)	1
- Filaria	1
- Head lice	1
- Hepatitis	1
- Infections	1
- Insect bites	1
- Liver damage from parasites	1
- Old age!	1
- Parasites	1
- Rabies	1
- Rat bite	1
- Unidentified chronic illness	1
- Worms	1

Scores relate to worries, not volunteers. Some volunteers had several worries, others none.

Some fears are justified e.g. Dengue fever. Most of the others could occur anywhere. But keep the apprehensions - they will help keep you healthy!

## 5. So What Have the Volunteers Actually Had?

### Minor Ailments

Cold, sore throat, cough	10
Diarrhoea	7
Infected bites	7
Skin rash	7
Headaches	5
Infections (e.g. ear, skin)	5
Lethargy	5
Food poisoning	4
Worms	3
Chest infection	2
Fever	2
I am healthier in Sri Lanka than in the UK	2
Sun burn	2
Athletes foot	1
Back problems	1
Cane bug bites	1
Constipation	1
Cracked feet	1
'Flu	1
Hair loss	1
Impetigo	1
Lack of sleep	1
Leeches	1
Mosquito bites	1
Piles	1
Sore eyes	1
Sports injuries	1
Stomach cramps	1
Stress	1
Urinary tract infection	1

### Major problems

None	13
Dengue (possibly)	3
Centipede bite	2
Fever	2
'Flu	2
Kidney stone	2
Bacterial infection	1
Drinking polluted water	1
Ear infections	1
Eczema	1
Giardiasis	1
Malaria	1
Migraine	1
Reiters syndrome and iritis	1
Tonsillitis	1
Tooth abscess	1
Typhoid	1
Viral infection	1
Vomiting	1

*In fairness to science, these records do not include illnesses that have contributed to the early return of a few volunteers.*

### EXERCISES

1. Consider the minor ailments first. Which of these are peculiar to Sri Lanka? Almost all can be experienced anywhere.
2. Now look at the major illnesses. Which of these would not occur in the UK? OK. Some conditions can occur only in the tropics. But they can be avoided with

care. That is why you are reading this document.





Do your answers affect your attitude to living in Sri Lanka or other Asian countries? Just be sensible, and you will be fine. This book will tell you how to avoid most of the problems.

## 6. Vaccination Advice

As we leave our bugs at home, we initially confront a new group of war faring microorganisms against which we may have little natural immunity until we have adjusted to the environment. This means that we cannot afford to be cavalier about getting our vaccinations and taking our medicines *exactly as the doctor ordered!*

- Consult your doctor for advice at least four weeks before travelling, and two months before if any vaccinations are necessary



Recommended vaccinations for Sri Lanka are:

- Diphtheria/tetanus
- Hepatitis A
- Hepatitis B
- Japanese encephalitis
- Meningococcal A + C
- Polio
- Rabies
- Typhoid

And ask your doctor about antimalarial tablets if you plan to travel in the malaria (dry) zone in Sri Lanka or other Asian country. You are also advised to bring a First Aid kit that includes syringes and needles in order to be safe from HIV infection in the remote possibility of requiring injections or infusions in rural areas away from main hospitals. Suggested contents are given in the Red Cross First Aid Manual. You can prepare your own list that may look similar to this:

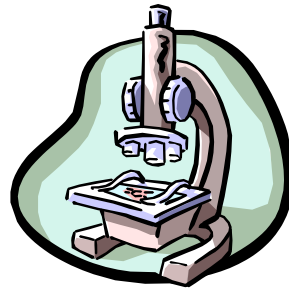
- |  |   |
|--|---|
| • adhesive dressings   | • antihistamine cream   |
| • medium and large sterile dressings                                     | • crepe roller bandages   |
| • sterile eye pads   | • scissors  |
| • triangular bandages  | • tweezers (forceps)  |
| • packet of safety pins  | • cotton wool   |
| • disposable gloves  | • a ball of string to suspend your bed net<br>or it can serve as a washing line |
| • antihistamine crème  |   |
| • ear buds   |   |
| • wound cleaning wipes   |   |
| • adhesive tapes   |   |
| • Optrex solution with eye bath  |   |
| • antiseptic fluid (e.g. Povidone) and antiseptic powder (e.g. Cicatrin) |   |

However, there are private hospitals that offer a high standard of health care.



## 7. A Word about Germs (a common name for bacteria)

Germs exist in a variety of shapes, sizes and kinds. All are small enough to require a microscope to see individuals. (That is why they are also called microbes). But some can grow in colonies of billions so that the total group becomes easily visible. Their reproductive capacity is remarkable as many can double their numbers every 20 minutes. While this may not be significant when numbers are small (1, 2, 4, 8, 16, 32, 64, 128, 256 etc) it can have a big impact with disease-causing organisms once the numbers are large (1 billion, 2 billion, 4 billion etc).



Invading germs, like soldiers, vary in their aggression and ability to overcome body defence mechanisms. Similarly, ability to defend our body territory depends on the state of our immune systems and the intact nature of our barriers to infection. Some infections can take hold within hours (e.g. throat infections, food poisoning); other diseases such as rabies, tuberculosis and leprosy may take months or years to develop in those with impaired immune systems or out-of-date vaccinations.

Most microbes do not cause diseases. You are usually unaware that as many as 100 different fungi live on the surface of your body. Some can cause diseases in certain circumstances e.g. Athlete's foot, Dhobi's itch (in the groin). Some of the 'good' bacteria in the gut can cause cystitis if they enter the urinary tract. Frequent and copious urine flow is therefore important for keeping that entrance flushed and free of invaders. Many bacteria in the body perform functions so important that we cannot live without them. In the gut they aid digestion and provide us with essential vitamins in return for accommodation, food, moisture and warmth.

**Infections.** In addition to bacteria, viruses, yeasts, fungi, microscopic animals, insects and worms may also cause infectious diseases. Any part of the body from the brain to the bladder, from the tonsils to the toes can become infected. Some infections are contagious and can be transmitted to other people by social or sexual contact, droplets from the mouth and nose, and unhygienic toilet habits. Other infections can be obtained through dirty water and food, or the environment. Yet others may be transmitted through genital secretions, the urine and faeces of vermin (rats mice, cockroaches and ants), or carried by vectors such as flies, mosquitoes, mites, lice, fleas, and ticks.

What makes some germs cause disease? Simply, there is a battle between the invasiveness of germs and the various defence mechanisms of the person. We have physical barriers, white cells that eat germs, immune systems and digestive juices to defend our position. Bacteria need an environment that produces their nutrient requirements. They have two basic mechanisms for getting there - invasiveness and toxin production. Invasiveness is the capacity to invade without being destroyed by the host defences. Some produce capsules or slime to prevent being engulfed by the white cells. Others produce toxins (any substance that produces a poisonous effect in the body) that make you feel sick, have a fever, or cause aches and pains. Some of the toxins can be destroyed by heat, but others cannot. This means that eating food that has 'gone off' with heat resistant toxin-producing bacteria can still make you feel ill even if the food has been boiled. If food tastes 'off', it is 'off' - don't eat it.

Many infections are self-limiting. That is, the body defences will normally overcome most new invaders within two or three days. So don't rush for the medicine bottle as soon as you feel fever or experience diarrhoea. Furthermore, many local infections are caused by viruses and you should remember that generally only bacteria, not viruses, respond to antibiotics. Your body can only provide antibodies and immune defences against diseases if the disease is allowed to run its course, or if you are vaccinated. If antibiotics are taken immediately you get a bacterial infection, your body does not get a chance to become resistant to that germ and you are likely to get the same infection again. As a rule of thumb, give an infection two or three days before you reach for the bottle. If you are forced to take antibiotics on the advice of a medical doctor, without fail take the complete course even if you feel better before the end. Bacteria have an amazing capacity to develop resistance to antibiotics, and taking an incomplete course encourages this to happen.

Understanding these simple facts is important in helping us perform rational hygiene practices in our domestic and personal lives. In general, where there is moisture and nutritional sources (such as dirt), germs can thrive. So keep your kitchen and bathroom dry. Hang towels and washing-up cloths so that they dry as quickly as possible. Take time to wring out sponges used for washing dishes. Iron your clothes in order to sterilise them, not just to get out the creases.

For those of you who are keen on swimming in fresh water there is an increasing risk of Weils disease (or leptospirosis) which is commonly carried by rat urine. This can be avoided by taking 100mg of doxycycline once a week.

Lastly, although antibiotics kill germs; they kill good as well as bad, and every time you take an antibiotic you will knock on the head some of your good tenants. It is like blowing up a block of flats because one of the occupants is unpleasant!

A dead germ → But you need a microscope to see it!

## 8. Mosquitoes and Malaria

Every creature is thought by some to have an appropriate place in the ecological system. But what about mosquitoes? Certainly some animals (such as spiders, insects, baby lizards and some birds) feed on them, but their main function seems to be concerned with limiting human population numbers! In Sri Lanka mosquitoes can infect people with malaria, dengue fever and filariasis (elephantiasis). Malaria is caused by a microscopic animal, dengue fever by a family of viruses, and filariasis by microscopic worms that block up lymph nodes in armpits and groins causing limbs to swell and take on an elephant-like appearance if untreated. Filariasis is of little risk to healthy people but is easily treated in the early stages. Dengue fever, like the common cold, can only be treated symptomatically. Malaria can also be treated but, at the time of this revision, malaria is considered by the Anti Malaria Campaign to be a low risk illness even in the dry zone. It is best dealt with by avoiding bites.

The incidence of malaria is now very low in Sri Lanka. Even the dry zone is not considered as a high risk area as the incidence there is also low. The monthly variation of malaria is not being seen now. So the Anti Malaria Campaign does not recommend chemoprophylaxis any more for the present time. Personal protection against bites is the recommended method and seeking medical care with suspected symptoms is best. In fact the Anti Malaria Campaign does not recommend routine chemoprophylaxis with any medicines any more. PLEASE NOTE THAT THIS DOES NOT APPLY TO OTHER COUNTRIES IN ASIA. So **a doctor or pharmacist should be consulted before starting** out on your travels in case the situation changes. You must check medical advice for other Asian countries where malaria is rife.

Mosquitoes feed by sucking your blood. To do this without their sucking tube getting bunged up with clotted blood, they first inject some saliva that contains a substance for stopping blood clotting. If the insect has earlier fed on an infected person, an infection can be passed on with the saliva. Some mosquitoes feed once; others are casual feeders biting several people before settling down to the feast.

Obviously the best way to avoid infections is to avoid being bitten. The World Health Organization advocates the use of bed nets impregnated with DEET. Generally these need retreatment every 6-12 months and they can be bought locally. There are some available with which the impregnation lasts as long as the life of the net. Fans over beds, regular use of insect repellents (DEET or citronella oil), mosquito-netting your apartment, and battening down the doors and windows at peak biting times (usually 16.00 to 19.00 hours in the rainy seasons) all contribute to the avoidance of being bitten. Wearing light coloured clothing which covers arms and legs also helps.

## 9. So a Word to the Wise.....



### 9.1 Look after your skin

#### **Skin structure**

Skin is a complex ecological system with billions of microbes inhabiting its surface and depths - yeasts, bacteria, moulds, and viruses are there in abundance. Use a hand lens to look at the geography of your skin. All ecological terrains are represented: desert, mountains and valleys, and tropical rain forest. Most of us also have mites that live around hair follicles or in the secretory ducts of sebaceous (fat) glands connected to our hair follicles, especially in the ears and nose, and around the eyes. Adult mites, that need a high powered lens to be visible, have four pairs of short legs. They can move slowly on the skin especially during the night. They crawl out occasionally to munch on a delicious meal of dead skin cells, bacteria and greenish granules of fat, find a mate and copulate, then crawl back into a follicle to rest from all their exertions.

Our resident zoo has the important function of keeping out invaders. If the skin is damaged or if too many of our normal inhabitants are removed, some of the other normal organisms may finish up in unintended situations and cause a problem, like snakes from the forest invading the house. Or damage, especially from heat, can destroy our defenders and allow disease-causing invaders to enter. So do not make holes in your skin by squeezing zits and scratching bites. If you get a splinter in your skin, remove it carefully and let the skin repair itself. It needs no help from you!

#### **Skin function**

Your skin functions to stop the outside getting in and the inside getting out (unless you make a hole in it). That's why you don't leak away when you have a bath! It is also essential for regulation of body temperature. About 10% of the body's blood flows through it. The more blood in the skin, the more heat we lose which is why we go red when hot, and white when scared (as the blood dives into our muscles ready for fighting or fleeing). The blood also provides the water for sweating and priority is

given to this process. If there is not enough moisture in the blood to allow adequate sweating, the blood system will take water from the gut and its contents causing constipation and headaches. More about water later.

### **Burns**

Many of your resident microbes produce antibiotics, which keep out invaders. Do not get rid of these important tenants by over use of soap. A burn sterilises the skin and the biggest hazard after a burn is infection. Once an area of skin is sterilised, invaders can land on the undefended territory, set up camp and multiply. So cover mild burns with a dry sterile dressing. Severe burns should be cooled under clean running water for at least ten minutes before covering. Such cases may require medical care. Do not apply any household remedies (egg, butter, oil, etc) before visiting a doctor. Once skin is severely burnt, it loses its relative impermeability to water, and several litres of body fluids can be lost unseen by evaporation.

Severe burns, therefore, must be followed by massive fluid intake to compensate, and to flush the damaged materials out through the kidneys. Do not burst blisters as these form a natural dressing. Let blisters resorb or burst naturally as this will only happen once the tissue underneath has begun to heal. (The same applies to scabs: do not scratch them off!) It is important to keep the burnt area protected against dirt getting in. Before dressing the wound, clean the site with non-alcoholic based fluid such as sterile salty water. Cover the wound with Vaseline on a linen dressing/gauze as Vaseline stops the dressing sticking to wet wounds. Clean and dress daily, or if the dressing gets dirty.

### **Sunburn**

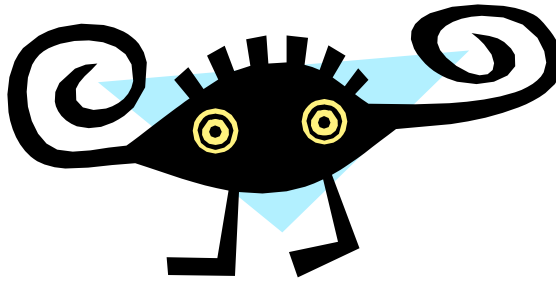
A real hazard in this climate. If you must flesh roast at all, use a barrier cream. And calamine lotion or *Aloe vera* (a herbal anti-inflammatory product) when you have burnt. Sun damaged skin becomes inflamed with more blood rushing to the damaged area. This results in heat loss and the feeling of being chilly. General advice is to avoid sunbathing. If you must, then check the hours of protection provided by a barrier cream. However, ten minutes a day is OK to build up Vitamin D for bone growth.



### **Bites: insects, millipedes, centipedes, leeches, snakes**

In Sri Lanka there are more than 90 different kinds of snakes and about one third are poisonous. Of these, the cobra, the krait and the viper cause most deaths. However, it is possible to be bitten by one of these and be little affected if the snake has recently discharged its venom while feeding. Non-poisonous snakes can also bite and this can lead to infection without poisoning. Handling of any reptiles should always be followed by thorough hand washing as many carry bacteria (*Salmonella*) infectious to humans.

Although scorpions, centipedes, hornets, wasps and other insects can sting or bite, such insults may be painful but they are rarely life threatening in Sri Lanka unless individuals are stung in the mouth or they are allergic to the stings. So victims should be observed for 24 hours in case undesirable reactions occur. Mosquitoes carry diseases in addition to malaria of which dengue fever is among the worst. Avoid mosquito bites by all means.



Leeches are plentiful, especially during wet periods in rural areas. They produce an anticoagulant (a substance that stops blood clotting) during sucking so that the bite area may continue to bleed copiously with the advantage that the area is well flushed and rarely becomes infected afterwards. A single flick is usually sufficient to dislodge leeches, but if not successful do not attempt to tear them away from their feeding place. If you do, you are likely to leave some of their 'teeth' in the skin and these may set up infection later. Instead, touch them with a hot match, alcohol in any form (not to be wasted!), soap or salt. You can rub soap on your boots and socks to discourage them from climbing up your legs.

- Snakes can be found anywhere in tropical Asia, in towns as well as rural areas. Flip-flops are not suitable footwear for hiking in rural areas where most snakes are found. Snakebite wounds should not be sucked or slashed with a knife. Reassure the victim. Remove bangles and bracelets on the affected limb in case of swelling. Immobilise the limb, wash the area well with soapy water, allow the wound to bleed and take the patient to hospital immediately.
- Remember that not all snakes are venomous and not all bites from venomous snakes are lethal.
- Ignore the improbable advice in some literature to capture the snake and take it to hospital for identification. Catching the reptile increases the risk of a second victim. Some hospitals have preserved snakes to aid identification. Anti-venom is generally available.

### **Infections of skin and nails**

Tropical temperatures mean that you will sweat more than in colder climates and you will shower here more frequently. Excessive use of soaps and shampoos can dislodge your resident microbes to such an extent that you become at risk from pathological infections. These invaders are often yeasts and fungi, but scratching itchy areas can result in secondary bacterial infections as well. With frequent bathing soap is not necessary if you take care to remove old skin scales with a rough flannel or brush giving particular attention to the toes and feet, groin and armpits. These are the most common areas for fungal infections. Right-handed people who write for long periods are more likely to get infection in the right armpit, as this arm is kept closer to the body. (Some fungal infections are bright red, so infected people should not raise their arms when visiting baboons with brightly coloured bottoms at the zoo!). Many skin infections are fungal and they are easily treated (although treatment must be continued sometimes for days and weeks) with fungicidal creams such as Citaderm or Mycil powder.

It may be fashionable back home to depilate (remove body hair) our private places. However, hair has a useful function of providing a large surface area for cooling and sweat evaporation. It keeps skin surfaces apart reducing moisture accumulation and risk of fungal infection. Furthermore, hacking away in those delicate areas with a razor increases risk of cuts, sores and subsequent 'invasions'.

Minor bacterial infections of the lower legs and feet should not be treated with creams that cause dirt and other possible germs to stick on the area while walking. So use Cicatrin antiseptic powder. A useful antiseptic solution for other parts of the body is Povidone cream or solution. Creams and solutions can be used on lower extremities at night when risks from dirt are less.



Insect bites can be treated with an antihistamine cream but do not use the application of the cream to scratch the area! If the itching stops you sleeping at night, take one Piriton tablet before going to bed. It also makes you sleepy, so avoid taking Piriton in the daytime unless you can doze at work. Please note that anti-histamine cream (for insect bites) is not always available in Sri Lanka although all other medicines are. So bring anti-histamine cream with you in your First Aid kit.

Nail infections due to fungi (rare in short-stay visitors) cause nail discolouration and nail deformity. Infections can be treated but treatment must be continued without fail until infected nails have been totally replaced. This may take three to six months.

A common skin problem, especially in the dry seasons, is cracking of the heels and lips. Lipsil readily controls both but it is advisable to have two of them: one for each location! Apply to heels at night after bathing and drying the feet. (Daytime application helps dirt to stick. Remember?). You can use a foot rasp to remove dead skin after a shower. This is the best prevention for cracked skin.

### **9.2 Look After Your Nine (or ten if you are a female) Orifices**

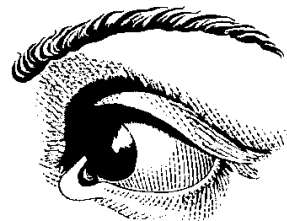
Some of the 'holes' in the surface of the body are used for exit, some for entrance, and others for both. Yet others are blind ending such as the ears. All are potential pockets for infection especially those that are cul-de-sacs. (There are other areas, such as the umbilicus (belly button) that become sealed off at birth, yet remain regions of weakness throughout life. In some African villages many children may be seen with umbilical hernias: the result of an outpushing of the gut through the body wall. Other similar areas of weakness and potential herniation are the passages through which the testicles descend into the scrotum, and the passage of the gut through the diaphragm). Some 'windows' into the body have a heightened risk of infection when used for purposes other than intended by nature! Infection risk may also be increased through poor hygiene practice.

Importantly, some of the orifices are portals for entry of infections, and others are portals for exit of human pathogens. Basic common sense should help avoid spread of infections.

The orifices are:

#### **a) Eyes**

Your eyeballs fit into sockets where they are attached by three pairs of muscles and the optic nerve. (It is not true that a surgeon can take your eyes out and rest them on your cheek to permit surgery behind the eyes). Movement is lubricated by tears produced from a tear gland and the fluid drains into the little pimple in the inside corner of the orbit connected by a duct into the back of the nose. The conjunctiva is the thin, transparent tissue that covers the outer surface of the eye. It begins at the outer edge of the cornea, covering the visible part of the sclera, and lines the inside of the eyelids. It



is nourished by tiny blood vessels that are nearly invisible to the naked eye. The conjunctiva also secretes oils and mucus that moisten and lubricate the eye.

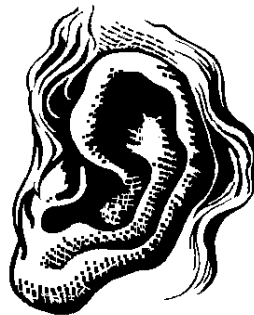
Tears contain antibiotics to stop infections that constantly bombard the eye. Nevertheless, the conjunctiva is susceptible to infections (conjunctivitis) that may be highly contagious and red through

an inflammatory blood flow. Travelling in hot dusty environments can cause inflammation that must be treated by bathing the eyes only with Optrex or sterile saline (0.9%) and a clean eye bath. If you normally wear contact lenses, take especial care in cleanliness.

- Remember, tears of a person suffering from conjunctivitis can infect others with the same disease. Wash your hands thoroughly if you have contacted a patient, and use separate towels if you live with someone who is infected.
- If you are going to spend hours at the computer, get into the habit of looking away frequently so the eye muscles, used for focusing over long and short distances, do not weaken.

### **b) Ears**

People poke their ears, not always in private, with all sorts of things such as rolled up pieces of newspaper and even little silver spoons made for the purpose of removing ear wax. The wax is produced in all of us by skin cells lining our outer ear canals. These include tiny glands, similar to sweat glands, which actually produce the wax to act as a protective layer, trapping dust and other particles which get into the ear. The wax slowly works its way to the outside, taking the trapped dirt and dust with it. Most people's ears clear the wax, which probably comes off on our pillows and towels, at a rate which means that it does not build up.



Some people may, at some stages in their lives produce wax at a faster rate. Other people have either one or both ear canals that are narrow, or that are at an angle which slows the natural passage of the wax. In these people the wax builds up, sometimes causing irritation or even deafness.

- Do not poke anything into your ears other than clean ear buds which should be inserted and gently rotated. Dirty items introduced here may cause infections or even rupture the eardrum.

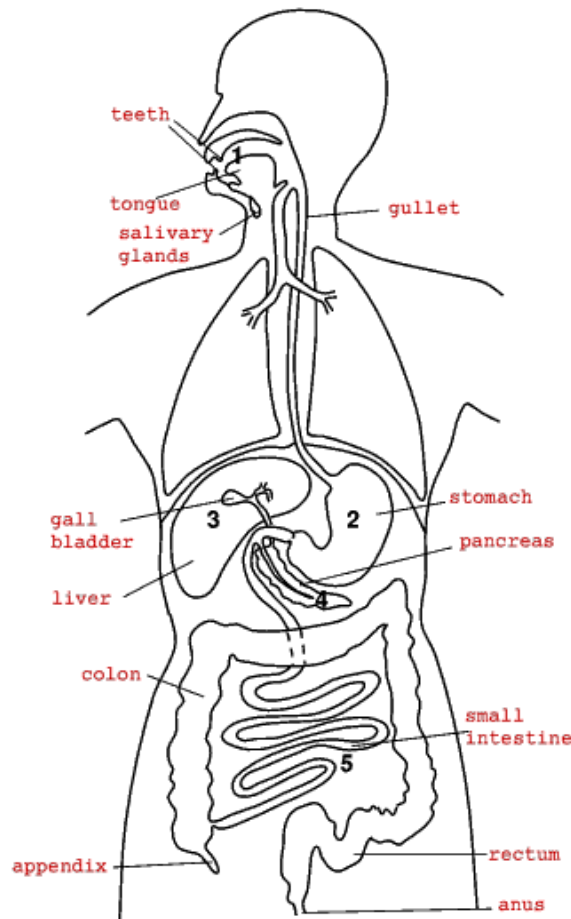
### **c) Nose**

Our noses filter and warm the air we breathe before it goes into the lungs. Cleaning is achieved by nasal hairs (that grow more than 2 metres in a life-time), by the mucus (or phlegm) that traps particles and infections, and by spiral shaped bones that provide a huge surface area for cleaning and warming. Air breathed in through our mouth and nose goes into the lungs. Our lungs are blind ending bags that have a total surface area the size of a tennis court. (Lungs might have developed as a huge kite-like structure on the end of a hose outside the body, but that would be a problem in the rush hour. So they have been folded nicely and packed inside our chest).

Study the following diagram for a few minutes. Note the air passages from the nose and mouth (1) that join in a space at the back of the nose and throat called the pharynx. Sometimes this region may become inflamed causing pharyngitis. ('-itis' means 'inflammation of'). In the naso-pharynx are located the adenoids, and forming a ring at the back of the throat are the tonsils. The adenoids and tonsils are the forward defence line (of the immune system) to protect the lungs from infections carried in the incoming air. Obviously they are particularly at risk from infection and may be beaten in the fight leaving you with a sore throat. Air from the nose and mouth passes over these structures before going



down the tube at the front of the throat into the lungs. Just to the right of the trachea in the diagram (but behind your trachea in your neck) is the gullet that enters the stomach (2), and there is a clever valve system that (generally) stops air entering the stomach, or food from entering the lungs.



Now after that heavy anatomy session, here is the important bit. Mucus in the nose traps most of the germs filtered from the incoming air. (This can be filthy especially in the dry season when it can contain all sorts of pollutants and even faecal dust!). Normally the mucus, or phlegm, is moved by microscopic waving hairs (cilia) up from the lungs and down from the nose into the back of the throat where it unconsciously gets swallowed into the stomach. Here there is enough strong acid to burn a hole through your doormat and the entrapped germs are safely digested away.

If we snort and sniff strongly we can stop the phlegm being swallowed into the stomach by sniffing and sucking the phlegm down into our lungs where the unusually high concentration of germs can easily set up an infection after overcoming the natural defences. Tobacco smoke has the effect of increasing the mucus production in the lungs and slowing the action of the cilia. This results in an accumulation of phlegm-entrapped germs in the lungs and that is why smokers and 'snort-sniffers' are so prone to respiratory infections.

- So don't smoke, and don't sniff. Blow your nose or sneeze into a handkerchief that can be washed or thrown away.

#### d) Mouth

Our mouths are complicated with a tongue, chewing action and saliva production stimulated by the presence of food in the mouth. (Just for interest, try swallowing repeatedly in quick succession. How

many times did you manage? Most 'normal' people do not get past three, unless food is put in the mouth, or you think about sucking a lemon). It is common for phlegm from the nose, or coughed up from the lungs to reach the mouth. (Remember what we said about mucus trapping germs?) Polite and healthy people will swallow this automatically and let the stomach juices do their stuff. Others spit and share the potential infections with others. Please don't spit, and encourage others to refrain.

- Our mouths may contain infective organisms from the air passing through nose and mouth, so do not wash your mouth out over cooking utensils or in sinks used for food preparation.

**e) Anus.**

To get to the bottom of the subject (so to speak), this exit is utilised by worms for passing out eggs often laid in the night around the anus. (About one third of the world population suffers from worms). Infected faeces are another source of infection. In the west we have adopted the unhygienic practice of using paper to smear residual faeces around the orifice after defecation. In Asia the cleaner practice of bottom washing is the vogue.

- Use the bottom-washer when facilities are available. If one is not plumbed into the toilet pipe, you may find a small bucket by the commode or hole-in-the-ground toilet. It takes some practice to use either without flooding yourself and everywhere, but practice makes perfect. By the way, do lift the toilet seat while sloshing water about so that the seat is hygienically clean and dry for the next person.
- Don't sit on surfaces used for food -preparation as clothing is no barrier to peri-anal infections and worm eggs that can start the cycle again after entering the mouth
- Never put your feet on tables or surfaces used for eating and drinking. Just try to imagine what may be sticking to your feet when you come in from the street!

**f) Urino-genital Orifices.**

Men have one; women two. (I would fail any design student who put the birth canal so near the anus!)

- Girls, when showering, get into the habit of washing your 'undercarriage' from front to back to minimise the risk of cystitis that is greater in a hot and humid climate.
  - clean the genital area mainly with water. Do not use excessive soap
  - dry thoroughly after bath or toilet
  - wipe from front to back
  - avoid douches and deodorant san-pants or use mild ones
  - wear cotton, not synthetic panties
  - minimise the use of panti-liners as they encourage sweating
  - moisture encourages growth of micro-organisms so change out of damp clothes and swimmers
  - keep healthy to strengthen immunity
- Men and women both need plenty of water so get into the habit of drinking water. Large volumes! Here's why.

The amount of water we drink depends partly on need and partly on habit. Our kidneys are capable of producing highly concentrated urine in times of desperation but urine flow serves not only to rid the body of waste but also to flush the urinary tract of germs attempting entry. Flushing the urinary tract is especially important after sexual intercourse (that's why cystitis is known as the 'honeymoon disease'). (Incidentally, cystitis can often be cured by drinking a glass of water with a generous tea spoonful of bicarbonate of soda (baking powder, as it changes the acidity/alkalinity of the urine which upsets many bugs). After all, it is warm, moist and nutritious up there from the germs viewpoint. Further, if you produce highly concentrated urine for long periods of time there is a danger of the

urine crystallising within the kidneys or bladder and the business of passing, cracking or removing those stones causes a pain that is interesting, to say the least. (After years in the tropics and three stones - BW knows!)

- Drink water or juices until your urine is odourless and colourless. It may take 3-5 litres a day in a tropical climate but stick to it. Alcoholic drinks help the flushing action but leave you dehydrated so you will need to drink more water after alcohol. Carry water with you when travelling.

# SEX

Readers of this booklet will hardly need reminding that, in addition to sharing hypodermic needles, or receiving blood from infected persons (through blood donations, razors, acupuncture needles, or tattoo needles), HIV infection can be passed on or obtained from vaginal and anal intercourse with infected partners. It cannot be obtained from insect bites, kissing, toilet seats, shaking hands, or HIV-negative partners. There may still be a risk from a person who has just been shown to be HIV negative if that person has been recently engaged in high-risk sexual behaviour. There is a window of opportunity of infection as it takes time for HIV positivity to become measurable (A certificate of cleanliness dated three weeks ago, or even yesterday, is still not a guarantee of non-infectivity. The time varies in different people but is usually about three weeks to three months.

- Avoid promiscuity and high risk behaviour. Male pre-ejaculate secretions can carry HIV as well as semen. Remember that there are many other unpleasant sexually transmitted diseases besides AIDS
- But people do have sexual relationships (you were not aware of that?), so do not go on a night out without taking condoms with you.
- On an equally practical note, females should know that availability of tampons and female condoms may be limited in many Asian countries. In Sri Lanka male condoms, (certified by the Family Planning Association) are available in any pharmacy or a grocery. So make sure you obtain adequate stocks when the opportunity arises or before leaving home.
- Thrush, a vaginal infection can occur. Women can buy Canestan cream and pessaries (devices inserted into the vagina for releasing medicine slowly) to treat this unpleasant condition

## 9.3 Look after your Gut

Although your gut is located inside your body, it is still an interface for food and water between you and the outside world. Ancient man probably stuffed himself silly for a few days after a hunting kill, and then managed on maggots, berries and fruit erratically until the next successful hunt. This means our ancestors did not pander to their stomachs much and virtually threw anything in at any time. We are not designed to keep to three meals a day. Such habits have mainly developed around modern employment patterns. For convenience we eat before and after going to work, and we need a break in between. Encourage your gut to be versatile. ("If the food is healthy, eat it. If you happen to enjoy it, that is a bonus", my father used to say in the wartime).

- *Get out of the habit of eating*

Now we have to discuss the unmentionable, so be prepared for it. (One of the delights of biologists is to discuss topics over the lunch table that most cannot mention in the privacy of their own bedrooms!)

The poo of a healthy person is composed mostly of dead and living bacteria, food remains that the body did not want to keep, no fat (it may look fatty, but it's not which is why you can easily wash yourself with a bottom washer), and water. The amount of water determines whether your poo is hard or soft; whether you have constipation or diarrhoea. In the tropics you will sweat and sweat, either running, or evaporating in a drier climate. Your body considers that temperature regulation is important: if it cannot obtain enough moisture from the blood to produce sweat, it will take it from the gut. This can lead to constipation and headaches. Now please listen carefully and watch my lips:

- In the tropics, water balance is really, really important for healthy living. Water is necessary for all the digestive processes, for temperature regulation, flushing the kidneys and bladder, stopping constipation, compensating for fluid loss with diarrhoea, and reducing many headaches (especially from a hangover). *Get enough water and more*
- *Get enough water and more. OK? How much? At least three litres a day from food and drink.*

## **WATER**

This is in bold capitals 'cos it's so important.



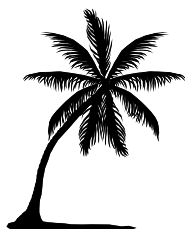
There was a case of a fellow who survived five days in the Mohabi desert without water, but most cannot get beyond three days. Many cannot manage even three days unless you are related to a camel. On the coldest winter's day in a freezing climate we lose half a litre of water a day just from our lungs. Our skins lose some more even without sweating. Anywhere in Sri Lanka during April, if I think about work, I soak my shirt. We also lose water in urine and faeces. And more if our skin is damaged from burns. So we need to get plenty of water on board - three to five litres a day, as we said.

If you have low resistance to infections, only drink boiled and filtered water. Excuse me; are you listening at the back? I repeat, to be safe, only drink boiled and filtered water when you first arrive. Don't pour boiling hot water into the filter because it will crack - and won't filter! In Colombo, so much chlorine is added to tap water that it smells like the swimming baths, so you can drink it. But go in gently. First brush your teeth. If OK, take a little more. If not OK, only drink what comes out of a bottle. Don't let anybody add ice to your drinks unless you are assured that the ice is made from boiled/filtered water. Look, I have really gone overboard with this one just for the benefit of those who are visiting for really short periods. It is not economical to spend loads of money on a holiday here only to spend half the time on the loo! Long-termers, just give yourself time to adjust to the water. To be utterly safe, drink only bottled water, but check that the seal is intact before opening as there is a good scam in refilling old water bottles.

"What to do", if you get diarrhoea? Initially, nothing, unless you feel so ill that you are about to shuffle off these mortal coils. It is possible to have the 'screamers' and feel 100% well. Viruses that will not respond to antibiotics anyway cause 80% of the 'runs', and they are normally self-limiting within three days. Our advice is to stop eating (you wanted to lose weight anyway), but keep up your fluids to flush the blighters through. Taking Imodium keeps the infection within while your body,

knowing best, is trying to get it out, so this medicine must only be taken if travel is absolutely inevitable. Anyway, it should not be taken by children. Otherwise:

- Drink coconut juice: the bright orange King Coconuts (thambili) are best. But ordinary coconuts will do just as well. Goodness knows why Asians throw coconut juice away for the most part. The juice contains a balance of sugar and salts, and the liquid is sterile. Thank you nature! An alternative is to put half a teaspoon of salt in a beaker and add cocoa/Pepsi cola. (Don't add salt to the bottle, or the whole contents will just fizz over the table. If you want to be posh, and have money to spare, buy fluid replacement salts or packets of oral rehydration salts available in almost every pharmacy in Asia.



- If you feel really ill and are vomiting as well, go to see a doctor. You will need an anti-emetic to stop the vomiting so you can get your fluid intake up to speed. You may even require a saline drip to get you back on your feet

In summary:

- if you have a headache, increase your water/fluid intake
- if you have diarrhoea, increase your water/fluid intake
- if you have constipation, increase your water/fluid intake
- if you are about to travel when water may not be readily available, increase your water/fluid intake
- if you have travelled, especially in a draughty vehicle which increases moisture loss from the body, increase your water/fluid intake
- if you have a hangover, increase your water/fluid intake
- if you are vomiting, wait until you have stopped, then take small sips with increasing frequency

### Alcohol

Now for the bad news! In the tropics, you will feel thirsty more often, drinks are stronger, and alcohol will be absorbed correspondingly faster. The brewing trade is based on some neat physiology - alcohol inhibits the hormone from the pituitary gland (in your brain) that is responsible for conserving fluid i.e. after alcohol, your body gets rid of more liquid than it has just taken in, so you feel more thirsty, and drink another one. Good business, huh?

Moreover, it used to be said that males can drink up to 28 units a week and females up to 21 units. In those days, a unit was a glass of wine, half a bottle of beer, or one shot of sock-rot. But all that was calculated when drinks had lower alcohol content and were sold in smaller volumes. So learn to calculate a UNIT. A unit is the volume times the strength divided by one thousand. For example, a bottle of stout is 625 ml and 8% alcohol. I used to think that was two units. Actually,

$$\frac{625 \times 8}{1000} = 5 \text{ units!}$$

So one bottle of stout a day is 35 units a week, and that is far over the limit for females and males.



## Food

Our instincts tell us that salads are healthy. Be careful! Anything that grows close to the ground and that is not easily washed may have faecal contamination. So be really fussy with lettuce. Tomatoes grow higher from ground level and are less risky.

- If you can peel it or boil it, you can eat it. Freshly fried food is fine, as hot oil (much hotter than boiling water) will zap all bugs.

By the way, once in a while you will bite on chillies in your food. You will know immediately as your eyes will grow out of your head, steam will jet from your ears as a minor explosion takes place behind your uvula. Time does heal, although you may be reminded of the experience in the bathroom tomorrow morning! Water does not help. But curd or yoghurt really softens the burning sensation. Always take curd with rice and curry if you are a novice at the game.

### 9.4 Look after your Mind.

Learn to relax. A tense mind produces a tense aching body. Conversely, a relaxed body relaxes the mind. So be able to recognise tension and learn to flop. Your heart rate is a sensitive barometer of action/tension.



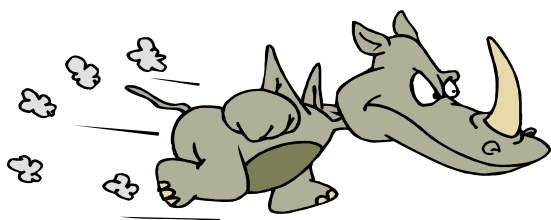
You can measure your heart rate in two easy ways shown in the diagrams above. In a dent on the thumb side of your wrist press gently with the thumb of your other hand to feel your pulse. (Note that your thumb has a strong pulse so you use your thumb to take your own pulse but your first two fingers if you are measuring the pulse in another). Or you can measure your neck pulse. (If you cannot feel either - phone for an undertaker!) Count your pulse for 15 seconds using zero for the first, then continue counting. Multiply by 4 and you have your minute pulse rate. Fully relax and count again. Repeat while thinking about sitting in the chair at the dentist while he charges towards you with a dripping syringe the size of a bicycle pump! You will notice significant differences. Now you can practise relaxing and checking that you are relaxed. (See Appendix 1 for further information and exercises).

Once your immune system is lowered from too much high living (sore throats and mouth ulcers are a barometer), anything can creep into your body.

Learn to meditate or get a guru. Be sure you have a balance of sleep, leisure time, diet and exercise.

### 9.5 Look after Your Pets

Dogs and cats in the tropics can carry about thirty different diseases that affect humans. These include some worms, toxoplasmosis (that can damage the developing baby in a pregnant mother) is a common risk from cat faeces, and rabies. Do not let pets lick your face. If they do, wash thoroughly. People bitten by animals suspected of rabies should be taken to hospital, although such cases do not require the urgency of snakebite victims. Even if you have had rabies vaccination you may still need further injections. But they are not nearly as bad as those required for an unimmunised person.



- Don't let pets lick your face; wash thoroughly if they do.
- Keep pets off seats and beds
- If bitten by a rabid dog, wash the area with soapy water and take the person to hospital
- Observe the dog for 10 days to see if rabies develops in the animal. There are two kinds of symptoms: a) Furious rabies (55%) - dog is barking, dog is biting the cage, dog is more active than usual, and puppies become unusually playful. B) Dumb Rabies (45%) - dog is less active than usual, dog is refusing feeds.

## 9.6 Look after Your House

Your house is **your** home. It is for you. However much you love animals, it is not healthy to share your home with an uninvited zoo. Enjoy the richness of the biodiversity in Asia in its natural habitat. So keep the livestock out of your abode. Trespassers must be prevented or persecuted and prosecuted. The problem with non-primate visitors is that they are unable to differentiate filth from food or s..t from sugar, and many do not just visit - they move in. If only you knew where they had been before they visited you! Your fertile brain can imagine the joy and satisfaction they get from the drains, the cesspits and the faeces out there. Their little feet have trampled over unimaginable materials. Stop them walking over your eating places and food preparation areas. But how?

- You must be much cleaner in your home hygiene than you are in the west. One crumb can keep a cockroach alive for weeks. A few sugar grains will last ants for ages. So clean up after you eat. Immediately. Wash up - immediately. Wipe the food preparation surfaces immediately. Clean your cooker immediately. It has to be done sometime but don't leave it until tomorrow allowing others to picnic overnight.
- Working surfaces can be wiped with neat lemon juice to discourage ants. Legs of tables, or bottles containing honey etc can be stood in water containers. Change the water regularly to stop mosquitoes breeding. As soon as the water dries up, ants will report the good news to their fellows and the swarm will arrive in minutes. Sometimes a light barrier of talcum powder across an ant trail is enough to block their progress.
- Keep every single thing that is edible in the refrigerator. Even dry rations. Most packets of dry food in Asia (rice, cereals, noodles etc) may contain weevils or other insect pests. You cannot stop the infestation at source but you can stop the invaders breeding and eating your food by keeping every possible food item in the 'fridge and freezer. Nothing will take harm in the freezer and nothing can breed at that low temperature.
- Cockroach bait (available for a few rupees in a small green packet) really works. Instructions tell you to sprinkle the powder in corners, but after a few days it gets glutinous and messy. Inevitably some food particles will fall under the refrigerator and become inaccessible to regular sweeping, so just open a packet and spread the end open leaving the powder accessible, then place the packet behind the 'fridge and in corners of other rooms. Or the packet can be emptied into the tray of a matchbox that is easily replaced every couple of months. It really works well. Cockroaches love it and they are zapped overnight. Take especial care to conceal the bait where children or pets may be at risk. The matching packet for flies is useless - it attracts flies that love it without being zapped.
- Rats and mice are best caught with traps. If you cannot face dealing with the corpses, then grind and mix one Paracetamol tablet in two teaspoons of cooked rice and leave that in a matchbox in the run. (Paracetamol is toxic in that concentration, equivalent to you taking a massive overdose.) The disadvantage is that the rodents may die in the roof space or behind a cupboard and smell richly for some time to say nothing of the potential breeding of flies!
- Many houses have open slits over windows to allow ventilation. But such openings are often at the same level as light bulbs so that dark evenings are associated with a varied insect collection arriving to share the illumination. Some hit the fan and become distributed around the room while softer ones just splat. Note from BW: Whenever I move into a new pad (and I once did this nine



times in ten years), I get the whole place mosquito netted. You can do it yourself with green netting, small batons of wood, panel pins and a hammer, or negotiate hard with a carpenter. My last landlord provided fitted netting free. You might also be lucky!

- Frogs and toads may live in your bathroom. These are less likely if you have a dry room, but most Asian bathrooms are like swimming pools. Dry ones are more hygienic. But frogs and toads will harmlessly limit other visitors. While some stick on the wall, others get into the cistern and toilet risking a cold flush.
- Encourage spiders. You can develop a system of several spider webs in the corner of the living room towards which a pedestal fan can be pointed. This drives the air through the webs and keeps mosquitoes to a minimum. (Incidentally, in the hot season you may need a fan or even air conditioning in some countries. The best way to keep cool when working is to place a small tabletop fan on the floor, the other side of your desk, to blow across feet, legs and body. It stops the maddening sand flies that bite ankles in the evenings, without blowing papers across the room.
- Avoid getting bitten at all costs. Batten down the hatches in the wet season from 16.00 to 19.00 hours, and use DEET or Citronella oil on your body, bed net and clothes as directed.

### **9.7 Look after your Clothes**

The humid tropical climate encourages clothes, especially leather belts, bags and shoes to go mouldy.

- Hang clothing on a pole, suspended by a line at each end, with air space between each item. The room fan will help air them every night. Wicker shelving is cheap and allows air passage between clothing
- Wear clothing in succession to ensure regular washing and ironing. Hang clothing in strong sunlight, and give bedding and pillows a similar 'picnic' when you get a chance
- Iron all clothing. It gets items dry and sterilises them in the process, reducing smell and possible infections

### **9.8 Look after your Computer**

Computers and keyboards are beautifully designed to accommodate ant nests. They are warm, dry and full of little chambers for breeding. Unfortunately, 'tenants' cannot be evacuated easily, and members get squashed under the key tabs insulating electrical contact once the corpses dry out.

- Always wash your hands before using your computer
- Never eat or drink in the proximity of your keyboard in case food particles fall in the works. You need a break from the screen so go to the kitchen area to drink your coffee and eat biscuits
- While it has little to do with health, why, oh why do some people touch the screen with sweaty, greasy hands? Trails of fatty sweat globules are left that attract flies and disturb visibility, sometimes critically. Cleaning dirty screens carries a risk of scratches, especially with soft laptop screens.

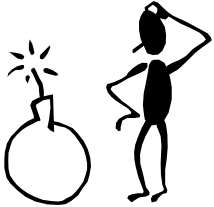
## 10. Health Care Systems in Asia

If you are in the small minority of people who do get sick in Sri Lanka, you have several choices:

1. Wait a little while before you do anything to allow your body the chance to deal with the problem
2. Look your symptoms up on Internet and doctor yourself. (Generally not a wise choice unless you have special knowledge)
3. Ask a friend who had an aunt who had something like it when she was in Mongolia and try to obtain some of Auntie's little white tablets (A most unwise choice)
4. Visit an Ayurvedic hospital or practitioner as recommended by a local. (For those who like complementary medicine this can be successful providing you do not require surgery or the repair of broken bones.
5. Attend a local hospital. (These vary in quality and services. A teaching hospital is best as it is linked to a university medical faculty. However, you may need to queue for a long time although foreigners are often given priority)
6. Attend a Channelling Centre. There are many of these but you will need to get a numbered ticket early in the morning in order to get an evening appointment the same day. (By this means, for only \$2-4 you can see the best doctors available, and the same day! You will not have a long consultation but you will be seen by a specialist, providing you know what type of specialist you need to see!)
7. Attend a Private Hospital. Competent practitioners will see you relatively quickly. (The cost is more but far less than at home)
8. Visit a practitioner privately. (It may be better to go first to a Channelling Centre and then ask the doctor to see you privately if he gains your confidence)
9. There are good eye hospitals in Colombo and Kandy and a Dental Institute in Colombo near the Eye Hospital. If you are unfortunate enough to need urgent hospitalisation, and you are fortunate enough to be in Colombo or Kandy at the time, dial 119
10. Perhaps the best option is to have good health insurance cover so that you can be repatriated if necessary. Of course, all insurance premiums seem far too expensive - until you need to make a claim. Then you wish you had taken a higher cover!

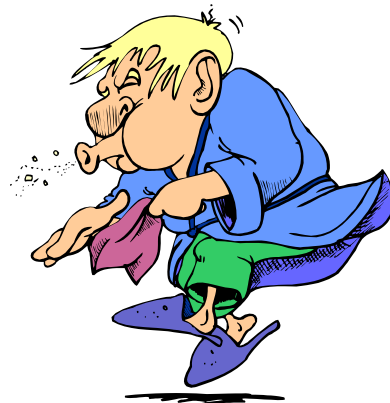
## LANDMINES AND UNEXPLODED DEVICES

During the twenty five years of civil war that has affected mainly the north and east of Sri Lanka, thousands of landmines have been laid. There can also be unexploded ordnances (UXOs) in the ground. While demining operations are still being undertaken, risks remain. Mined areas are usually clearly signed but always be alert as warning signs have sometimes been removed by weather or other circumstances. There is the possibility of mines becoming relocated by floods. As a safe rule, never leave the road or track when travelling in the north or east. If you see something that looks suspicious, DO NOT TOUCH IT. Mark its position with a ring of stones or sticks, and report it to the nearest police station.



### 11. General Rules for Keeping Healthy

- Always use treated bed nets or fan to avoid mosquito and other bites
- Do not spit, cough, sneeze or blow your nose in the air



- Trap coughs and sneezes in a handkerchief (Droplets from the nose and mouth can be expelled over several metres with a strong sneeze!)
- Do not sniff and snort. This can carry germs, trapped in mucus, into the lungs to cause infection there
- Do not wash your mouth in sinks or over utensils used for food preparation
- Do not sit or put your feet on surfaces used for food preparation. (Germs and eggs from worms can pass as easily through clothing as a stone can be thrown through an open window!)
- Always wash your hands thoroughly after using the toilet or travelling, handling money or touching any possible source of infection
- Take a First Aid kit and keep it with you at all times. The only time you will need it is when you have left it back at your lodgings with your main luggage! It could include syringes and needles (although these can be purchased at any pharmacy).
- Drink water and drink water. If your urine is yellow and smelly - drink water!

## **PERHAPS IT IS SAFER FOR ME TO STAY AT HOME!**

The Times (Tuesday March 29 2005) reported on figures released by the (UK) Department of Health: “It’s a jungle out there. Alligator body crushes, bites from scorpions and snakes, and cuts from sharp leaves were some of the incidents that put Britons in hospital last year.

Incidents ranging from the painful and tragic to the strikingly unusual were responsible for sending almost a million people to accident and emergency departments according to figures released by the Department of Health.

The natural world played a small part: 451 people were stung by hornets, 6 were bitten by scorpions, 46 by snakes, 24 by rats and 2 were struck down by centipedes.

Hobbies and household objects contributed to A&E admissions: 22 people suffered mishaps with their pyjamas, 9 had accidents with their beds, and 4,533 were injured by ice skates, skis, skateboards, and roller skates.

Twenty-two people were exposed to “ignition or melting of nightwear”, most probably due to a stray cigarette or a faulty electric blanket.

The cost to the National Health Service of accidents is believed to be about £1 billion a year. The definitions for admission have all been devised by the World Health Organization and cover even the most unlikely scenarios, some of which occur abroad but result in hospital trips back home.

At the more unusual end of the scale, exposure to noise and vibration accounted for eight admissions, while one child had to attend hospital after a “prolonged stay in a weightless environment”. Forces of nature also took their toll, according to the official statistics with 37 people admitted as “victims of volcanic eruption”, 7 because of earthquakes, 8 after avalanches and 25 due to “cataclysmic storms”. Lightning put 54 Britons in hospital.

A further 107 people suffered exposure to “unspecified forces of nature”, 239 experienced incidents with “animate mechanical forces” and 9 suffered “accidental suffocation and strangulation in bed”.

As many as 207 people had to spend time in hospital after “coming into contact with plant thorns, spines, and sharp leaves”. Contact with “a non-powered hand tool” – such as hitting your hand with a hammer – claimed 4,115 victims, while 299 people were hurt with lawnmowers. Almost 2,000 people, mostly children had to go to hospital after falling out of trees.

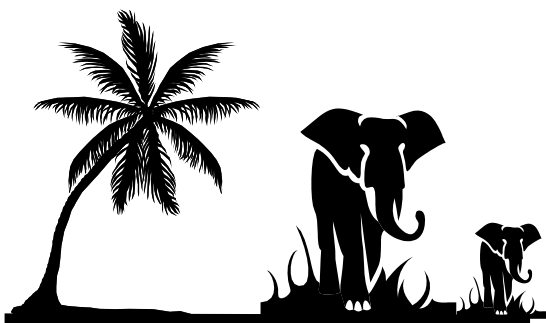
The figures for the 12 months to last April also take into account the 138 people who had foreign objects left in their bodies during surgery.

According to the Royal Society for the Prevention of Accidents, accidents in the home account for an estimated 4,000 deaths a year. A spokesman for the Department of Health said that the description of some of the accidents as set by the WHO, left even the Government puzzled. He ventured that the case of “prolonged weightlessness” probably referred to a fairground ride.”

***Our Comment.*** *As most people die in bed, avoid beds at all cost. Even if you don’t die, you may be accidentally strangled!*

## 12. Summary

1. Don't smoke. Each cigarette is 5 minutes less of your life; work it out
2. If you drink alcohol, take it little and often. Males can have 28 units/week and females 21 (sorry about the gender imbalance). Recalculate your units per glass.
3. Even if you are well within your limits, neat spirits may have local toxic effects on mouth, oesophagus and stomach. So dilute your arrack with something. Ginger beer is good.
4. Aim to drink at least 3 litres of water a day. Keep drinking water until your urine is colourless and odourless. Don't forget that alcohol leaves your insides dehydrated not moisturised.
5. Get a balance of diet, exercise, sleep, action (mental and physical) and rest.
6. Coughs and sneezes spread diseases. But you can catch things from door handles and dirty, wet towels
7. Take care at the beginning. Then cautiously relax. You eat a ton of dirt before you die, so start soon but not too soon
8. Give nature a chance to cure. Drugs are a last desperate resort when all else fails. Do not slam in antibiotics for everything. Doing this postpones the time for your body to make its own antibodies. Anyway, antibiotics are ineffective against viruses which are common causes of disorder
9. Most gut infections are self-limiting infections. Give them a chance to self-limit. Help yourself by starving the blighters, but keep up your fluid intake. King coconuts are perfect. Coke with half a teaspoon of salt is also OK.
10. Do not forget that antibiotics hammer your own microbes as well as your visiting ones
11. Never, never, NEVER, ever scratch or pick bites or spots here.
12. Eat anything you can peel, boil or fry.
13. Avoid handling other people's pets. Don't live with a zoo.
14. Do not put ice in drinks unless the ice is made from clean water
15. Take your medicines exactly as ordered - no more, no less (especially with antibiotics)
16. Listen to your body. Mouth ulcers probably mean that you need more sleep. Constipation and headaches mean you need more water. Sore throats probably mean less smoking/drinking and a few early nights
17. Iron your clothes: ironing sterilises. Cleanliness is next to healthiness.
18. If you plan a pregnancy, clean up your life style 3 months before and keep it up. Fathers as well!
19. Be happy in Asia
20. Be healthy in Asia. *"But if sickness is inevitable, relax and enjoy it"*



## **Appendix 1. MANAGING STRESS**

### **Biology of stress**

Our bodies have survival mechanisms for responding to immediate and long-term stress. However, one person's stress can be relaxation for another. While some are scared of spiders or walking along a cliff edge others actually enjoy the 'adrenaline rush' induced by bungee-jumping, mountaineering, extreme sports and free-falling from aeroplanes!

### **Effects of stress**

If stress becomes chronic and is not recognized or managed it can lead to several undesirable changes. These can include feelings of loneliness, emptiness, anger, hatred, frustration, swings in energy level and mood, concentration problems, restlessness, irritability, anxiety, fear, depression, sleep and digestive disturbances, re-experiencing events, self-reproach and guilt, even psychosomatic illness. Wow!

### **Techniques for coping with stress**

So stress must be avoided or managed. Care can be taken before, during or after working in a new post or different location.

Here are four well-tested methods:

1. Experience a good massage from a professional. But be selective as many massage parlours have other intentions. (Disabuse your mind of the idea that a sauna is relaxing - physiologically it is highly stressful).
2. Lie on your back and rest your hands on stomach or thighs. Now work through your body, starting with your feet and progressing to your face: tense the muscles. Hold the position - and relax. Bend your feet towards your knees hard; hold them in tension for a few seconds. Then relax. Repeat for your calves, thighs, buttocks, back, abdomen, chest and arms, neck and face (in a silent scream). Make sure the relaxation is complete and check from time to time that muscle blocks stay limp after tension. There are good tape recordings of music and instruction available if a prompt is needed.
3. A more advanced approach is to leave out the tension components and use your mind alone to ensure relaxation using the same progression from feet to head. This can be combined with observing the sensations in your skin where it contacts with the bed, and registering the sensations in your mind with detachment and equanimity. Just be aware, and survey the whole surface of your body systematically. Do you feel itch? Tingling? Pressure? Discomfort? With practice you can extend the approach to leaving the skin and entering body cavities such as the ears and mouth.
4. Slow breathing has been demonstrated to lower blood pressure, slow the heart rate and induce relaxation. We usually use two sets of muscles for breathing: the diaphragm and those between the ribs. While you are reading this, place your left hand on the bottom of your rib cage under your right arm. Try breathing only with your diaphragm when no movement will be felt here. Now take a huge breath in as if in panic; your rib cage will move up and out as in excessive exercise.

While lying on your back you are going to change your breathing from about 12 times a minute to half that amount. Concentrating on diaphragmatic breathing, Inhale maximally for six counts (seconds), hold for three, exhale totally with a deep sigh for six to nine, and hold for three; repeating the controlled breaths. Do this ten times for a start and increase to slow breathing for 15 minutes later if you can.

The last three exercises are best done lying on your back in bed but they can be practiced anywhere and at any time, even sitting at your computer or standing waiting for a bus.

On returning home do seek help or counselling if you need it. There is no shame associated with returning home wounded after a tough assignment



## Appendix 2. AVOIDING INFLUENZA

### Advice from the University of Kansas Hospital to Prevent Swine 'Flu

The only portals of entry are the nostrils and mouth/throat. In a global epidemic of this nature, it is almost impossible to avoid coming into contact with H1N1 in spite of all precautions.

While you are still healthy and not showing any symptoms of H1N1 infection, in order to prevent proliferation, aggravation of symptoms and development of secondary infections, some very simple steps can be practiced:

1. Gargle twice a day with warm salt water or Listerine (mouth wash). H1N1 takes 2-3 days after initial infection in the throat/nasal cavity to proliferate and show characteristic symptoms. Simple gargling prevents proliferation. Gargling with salt water has the same effect on a healthy individual that Tamiflu has on an infected one. Do not underestimate this simple, inexpensive, and powerful preventative method.
2. Blow the nose hard once a day and swab both nostrils with cotton buds dipped in warm salt water or Listerine. This is very effective in bringing down the viral population of the respiratory tract.
3. Boost your natural immunity with foods that are rich in Vitamins C and D. If you have to supplement with Vitamin C tablets, make sure that it also has zinc to boost absorption.
4. Drink as much warm liquids (tea, coffee, etc) as you can. Drinking warm liquids has the same effect as gargling, but in the reverse direction. The warm liquids wash off proliferating viruses from the throat into the stomach where they cannot survive, proliferate or do any harm.
5. Above all, wash your hands frequently with soap or hand disinfectant lotion, especially after visiting public places, touching door handles and work surfaces.

K.Gowriswaran, MBA  
Health & Nutrition Officer  
UNICEF, Batticaloa, Sri Lanka

## Appendix 3. HAVING HEALTHY BABIES

### INTRODUCTION

Many ex-patriot workers have brought their children with them and others have given birth on the tropical island of Sri Lanka or in mainland India. In the West every birth is accompanied by some risk, which may be increased abroad if special care is not taken. Without the support of family and some medical services, pregnant mothers may prefer to resort to private clinics for ante- and post-natal care. The channelling system in Sri Lanka allows fast access to the best physicians available and many aspects of the health service, especially in the private sector, are better than those found at home.

The World Health Organization believes that about 10% of defects, and many other perinatal problems, can be avoided but some authorities put the possible reduction rate as high as 60% if appropriate guidelines are followed; mothers and fathers should adopt a healthy lifestyle at least three months before starting a pregnancy.

So an actual reduction in birth risks can be achieved with care, but the responsibility must be shared between mothers, fathers, and families. And midwives, nurses and doctors!

If you are already pregnant, you should consult your doctor to advise you about when you are safe to fly.

### KEY MESSAGES

#### Before marriage

1. Get vaccinated against German measles (*Rubella*). This infection, and some other infections, can damage the developing baby.
2. Do not marry a blood relative (i.e. the mother and father having at least one grandparent in common).

#### Before conception

3. Adopt a healthy life style. Healthy parents are most likely to have healthy babies
4. Have a health check *before* getting pregnant. Some illnesses, which are not controlled in the mother, may harm the developing baby.
5. Start folate (folic acid) supplementation to reduce the risk of damage to the embryonic brain, spinal cord and heart. This is especially important for mothers who have had an affected baby, or mothers who are taking anti-epileptic medicines. You may need iron supplementation as well.

#### After conception

6. Continue folate supplementation until at least the end of the third month of pregnancy.
7. Avoid smokers and smoking.
8. Avoid self-medication and alcohol during pregnancy, especially during the first three months.
9. Visit an antenatal clinic for a health check for you and your baby (babies?)

#### For the family

10. Have your children between the ages of 20 and 30 with two or three years between each child.
11. "Breast is best" so aim to breast feed without supplements for at least the first six months

There may always be a small minority of babies that require surgical and medical remedies at birth, but primary prevention of conceptions resulting in defective babies is more cost effective and less traumatic for families and communities than termination of faulty pregnancies (illegal in some countries), or tertiary care of disabled babies.

## SUPPORTING INFORMATION

1. Get vaccinated against German measles (Rubella). This infection, and some other infections, can damage the developing baby.

Some infections cause only a mild illness in the mother, but severe damage to the developing baby. Some of these, such as Toxoplasmosis, can be caught from cats and dogs. Others, like *Herpes*, are caught from other humans. These infections can damage the baby's heart, sight, hearing, brain or other parts of the body. *Rubella* is one of the worst, yet is most easily avoided, so make sure vaccination is completed before marriage or at least three months before getting pregnant. Generally avoid any infections and make sure that fever is reduced.

2. Do not marry a blood relative (i.e. the mother and father having at least one grandparent in common).

Parents who are married to blood relatives have a higher risk of having babies who need some medical aid at birth. Such babies have a greater chance of being still born or being born with mental and physical problems. Many congenital disorders are not seen at birth and only appear in childhood or even in adult life.

3. Adopt a healthy life style. Healthy parents are most likely to have healthy babies.

If you live in a healthy way, you can influence others to do the same. In any case healthy parents are more likely to have healthy children. Have a good balance of nutritious food, exercise and sleep. Parents should know their ideal weight for their height and not allow themselves to get overweight or underweight.

4. Have a health check *before* getting pregnant. Some illnesses, which can be controlled in the mother, may harm the developing baby.

Some diseases, if not controlled in the mother, can harm the developing baby. Mothers should have a health check for high blood pressure, diabetes, kidney diseases and anaemia before becoming pregnant. If the diseases are not controlled the mother and baby can be severely harmed.

5. Start folate (folic acid) supplementation to reduce the risk of damage to the embryonic brain, spinal cord and heart. This is especially important for mothers who have had an affected baby, or mothers who are taking anti-epileptic medicines. You can take folate without ill effects for months. Better earlier than later. So when you pack your honeymoon bag - pack your folate tablets!

6. Continue folate supplementation until at least the end of the third month of pregnancy.

Folic acid is present in most foods, particularly green vegetables, but prolonged cooking destroys it.

Folic acid (one of the B vitamin group) is most important for normal development of the fetal brain, spinal cord and heart. It needs to be taken daily (0.4 milligrams) particularly throughout the first three months of pregnancy, and starting at least one month before conception in order to be fully effective. Mothers who have already had a baby with defects of the brain and spinal cord, or who are being treated for epilepsy, should take 4 milligrams daily.

7. Avoid smokers and smoking.

For a long time we have known that mothers who smoke can damage the baby as well as their own health. Now we know that if the mother inhales smoke from others who are smoking, this can also damage the baby. If the father smokes in the company of a pregnant mother, the baby has a greater risk of prematurity, of low birth weight or of being affected by childhood cancers and other illnesses.

8. Avoid self-medication during pregnancy.

Many medicines should not be taken during pregnancy, but a few are relatively safe. If they are prescribed, they must be taken *exactly* as the doctor says. If too little is taken, the illness may not be cured. If too much is taken, it can be dangerous or even deadly. Antimalarials should be taken throughout pregnancy in endemic areas, but only as prescribed by a medical doctor.

Avoid alcohol during pregnancy.

Before handling chemicals used in agriculture, or for any purpose, look for warning signs on the container.

9. Have your children between the ages of 20 and 30 with two or three years between each.

The best time for child bearing is between 20 and 30 years of age. Mothers under 20 or over 30 (especially under 18 or over 35) have more problems with their babies than do mothers between 20 and 30 old. Families are best limited to two or three children with a couple of years between each child.

10. Avoid being bitten by insects or sharing your home with them, especially those which are known to carry germs and infections e.g. ants, flies, cockroaches and mosquitoes. It is usually relatively simple to fit mosquito netting to a house or apartment. If there are difficulties, make sure you use treated mosquito nets over beds at night, high-speed fans, insect repellents, and appropriate clothing (treated with DEET or citronella oil) in high-risk areas.

11. As your children grow, make sure that the recommended vaccination programme is followed.

12. Continue with your healthy lifestyle ready for the next addition to the family!

**JUST IMAGINE A  
BEAUTIFUL  
PHOTOGRAPH IN THIS  
SPACE OF THE PERFECT  
HAPPY FAMILY.**

**OR INSERT A PICTURE OF  
YOUR OWN FAMILY!**