WOMENS HEALTH FLOW CHART,

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1. FEELING UNDER THE WEATHER

Sometimes you may have a vague, generalized feeling of being sick without being able to locate a specific symptom such as pain. This may be the result of a minor infection or unhealthy life-style, but occasionally it may be a sign of a more serious underlying problem that requires medical treatment.

Do you feel continually on edge, with a sensation of butterflies in your stomach?

YES  Anxiety as a result of a specific problem or stemming from an accumulation of stress, can make you feel sick. Go to chart 20 Anxiety

NO  Have you lost more than 10 lb (4.5 kg) in weight over the past 10 weeks without trying?

YES  Go to chart 3 Loss of weight

NO  Is your temperature 100 F (38C) or above?

YES  A viral infection is the most likely cause of a general feeling of ill health and fever. Go to chart 6 Fever

NO  Are you tired or lacking in energy?

YES  Go to chart 2 Tiredness

NO  Are you taking any medication?

YES  Drugs can have side effects and make you feel sick. Discuss the problem with your physician.

NO  Consult your physician if you are unable to make a diagnosis from this chart.

THE EFFECTS OF ALCOHOL

The main immediate effect of alcohol is to dull the reactions of the brain. In small quantities, this can produce a pleasantly relaxed feeling but in larger amounts can lead to gross impairment of memory, judgment, coordination and emotional reactions.
Alcohol also widens the blood vessels, making you feel temporarily warm. However, body heat is rapidly lost from the dilated blood vessels and this can lead to severe chilling (hypothermia). After a heavy drinking session, you are likely to feel tired and nauseated, and may have a headache, as a result of dehydration and the damaging effect of alcohol on the stomach and intestines.

**Long-term effects**
Regular consumption of large amounts of alcohol can lead to the following serious health problems:

- **Obesity** is likely as a result of the high-energy value of most alcoholic drinks.
- **Liver damage** (cirrhosis, when the liver can no longer process nutrients or drugs) is almost inevitable.
- **Brain shrinkage** has been observed in many heavy drinkers.
- **Addiction** with accompanying social problems is a real risk for even moderate regular drinkers.

**Women and alcohol**
Excessive alcohol consumption has special dangers for women. It is now known that women are more susceptible than men to the harmful effects of alcohol on the liver. This is because of differences in the way their livers process alcohol. Apart from endangering their own health, women who drink during pregnancy risk damaging the unborn baby. Even small amounts of alcohol may increase the chance of a baby being born underweight and mentally retarded.

**Maximum safe alcohol intake**
Anyone who regularly drinks more than 3 alcoholic drinks or goes on drinking binges is risking serious health problems. For safety, keep your drinking at a much lower level.

**BLOOD ANALYSIS**
Blood is the principal transport medium of the body. It carries oxygen, nutrients and other vital substances to the body tissues and carries waste products away. The blood is composed of three principal parts: red cells containing the red pigment (hemoglobin), which carries oxygen; the white cells (which fight infection) and platelets (which fight infection and seal damaged blood vessels), and the plasma, a yellowish fluid in which the blood cells, nutrients, chemicals and waste products are suspended.

Modern techniques for counting the numbers of different types of blood cells contained in a blood sample—a procedure known as a blood count—can help in the diagnosis of blood disorders. And examination of the chemicals in the plasma can give clues to diseases of many other parts of the body.
2. TIREDNESS

Consult this chart if you feel tired or lacking in energy during the day or if you spend more time asleep than you normally do. Lethargy is a common symptom of many disorders, some that require medical treatment. Sudden severe drowsiness is a serious symptom and requires prompt medical attention.

Could you be suffering from sleeplessness?

**YES** Insufficient or disturbed sleep for more than a few days, for instance, as a result of jet lag, is almost certain to make you feel tired during the day. A night or two of sound, uninterrupted sleep will probably make you feel much better. If you have difficulty getting to sleep or if you regularly wake during the night, Go to chart 5 Difficulty sleeping.

**NO** Do you have two or more of the following symptoms?
- feeling the cold more than you used to
- thinning or brittle hair
- unexplained weight gain
- dry skin

- **YES** Hypothyroidism (underactive thyroid gland), a problem that is most likely to occur in middle-aged women, is a possibility. Consult your physician.
  - **Treatment:** If hypothyroidism is diagnosed, your physician will probably prescribe tablets of synthetic thyroid hormones. These tablets will make you feel much better in a few days, and after a few months you should have returned to normal health. However, it will probably be necessary to keep taking the tablets.

- **NO** Do you have two or more of the following symptoms?
  - paleness
  - faintness
  - breathlessness
  - palpitations

- **YES** Anemia is a possibility, especially if you have heavy periods, eat a restricted diet or have had blood loss. Consult your physician.
  - **Treatment:** Your physician will probably take a sample of blood for analysis (see Blood analysis, opposite). If you are found to have anemia due to iron deficiency, your physician may give you iron in the form of tablets or injections. In addition, he or she will probably advise you to make sure that you eat plenty of iron-rich foods such as meat, whole-grain bread, dried fruits and green leafy vegetables. Other forms of anemia require laboratory investigation before treatment can be given.

- **NO** Do you drink more than 3 small glasses wine, 3 small beers or 3 shots of whiskey (or the equivalent) most days?
YES Regular consumption of alcohol, even in seemingly moderate quantities, can have a depressant effect, making you feel tired (see also the box on The effects of alcohol, opposite).

Self-help: Cutting out alcohol for a week or so and making sure that you get enough sleep should make you feel better. If you find it hard to cut down or if you have difficulty getting to sleep without the help of alcohol, consult your physician.

NO Do you have one or more of the following symptoms?

- inability to concentrate or make decisions
- lack of interest in sex
- recurrent headaches
- feeling low or “blue”

YES Depression can make you feel tired and run down. Go to chart 19 Depression

NO Have you been working hard without a break for several weeks?

YES Overworking for an extended period has probably caused your tiredness. Women who work and who have demanding children or relatives to care for often become run down without realizing it.

Self-help: Try to take some time off if possible, or rearrange your routine to allow yourself more time for relaxation. If you find it difficult to arrange for help at home, discuss the problem with your physician who may be able to organize some help for you.

NO Have you recently recovered from an infectious illness, for example the flu or infectious mononucleosis?

YES Recovery from many such illnesses can take several weeks. During this period you are likely to feel tired and depressed.

Self-help: Do not expect too much of yourself at first. Make sure that you eat a nourishing diet and take things easy until you feel better. If symptoms persist for more than a month, consult your physician.

NO Consult your physician if you are unable to make a diagnosis from this chart.
TIREDNESS IN EARLY PREGNANCY
Tiredness is an almost universal symptom of early pregnancy. Some women notice it even before the pregnancy has been confirmed. So, if you are feeling tired for no apparent reason, and you have missed a period, consider the possibility that you may be pregnant.
Tiredness in pregnancy is a normal reaction to the major changes in your body, and does not indicate any special problem. The best way of coping with it is to take more rest. Try taking an afternoon nap or go to bed an hour or so earlier. Most women start to feel more energetic by the fourth month of pregnancy, although tiredness is likely to return in the final 6 weeks before delivery.
3. LOSS OF WEIGHT

Minor fluctuations in weight of only a few pounds, as a result of temporary changes in the amount of exercise you take or the amount of food you eat, are normal. However, more severe unintentional weight loss, especially when combined with loss of appetite or other symptoms, usually requires medical attention. Consult this chart if you have lost more than 10 lb (4.5 kg) in a period of 10 weeks or less, or if you have any of the signs of weight loss described in the box on the facing page.

Thyrotoxicosis
(overactive thyroid gland), an uncommon disorder that chiefly affects women, is a possibility. Consult your physician.

**Treatment:** If your physician suspects the disorder, he or she will probably take some blood for tests (see Blood analysis, p 22) to confirm the diagnosis and you may need to have a radioisotope scan of the thyroid gland (below left). Treatment usually consists of drugs or injections of radioactive iodine. In some cases, surgery to remove part of the gland may be necessary.

Eating less than your daily energy needs is the most likely cause of your weight loss, if you feel well. However, you discuss the problem with your physician to eliminate the slight possibility of an underlying disease.

Diabetes mellitus is a possibility. This disorder is caused by insufficient production of the hormone insulin, which is needed by the body to get energy from sugar and carbohydrate foods. Consult your physician.

**Treatment:** Your physician will probably arrange tests on samples of urine and blood see Blood analysis p. 22). If the diagnosis is confirmed, you may need treatment with drugs or with regular injections of insulin. Your physician will also advise you on what diet you should follow and the importance of regular meals. You should seek special advice if you intend to have a baby because the disease carries risks for both mother and baby during pregnancy.

**RADIOISOTOPE SCAN**

Physicians sometimes use this type of scan to find out whether and how a gland or organ is malfunctioning. A radioactive chemical is injected into the bloodstream and is absorbed by the
organ being examined. This organ is then scanned with specialized equipment to determine whether or not the chemical is being absorbed evenly and normally. The result of the scan is shown either on photographs or on a television screen.

**WEIGHT LOSS IN PREGNANCY**

Most women lose some weight in the first 3 months of pregnancy, as a result mainly of loss of appetite, nausea and vomiting. This usually is not considered a problem unless you lose more than 8 lb (about 4 kg) or are extremely thin. In this case it is advisable to consult your physician, because it may mean that persistent vomiting is preventing you from obtaining adequate nourishment. Nausea and vomiting normally subside by the 12th week of pregnancy and by the 14th to 16th week you should begin to gain about 1 lb (about 0.5 kg) a week, until about the 38th week.

**Abnormal weight loss**

If you fail to gain weight at a satisfactory rate or if you lose weight after the first 3 months, you should consult your physician. He or she will ensure that you are eating properly and may arrange for tests, including urine and blood analysis (p.22.) and possibly an ultrasound scan (p. 136) to make sure that the placenta is functioning properly and that the baby is developing normally. It is extremely important for you to get prenatal checkups throughout pregnancy so that a close watch may be kept on your weight gain and action taken when necessary.

**Pattern of weight gain and loss in pregnancy**

Have you noticed one or more of these symptoms?
- recurrent bouts of diarrhea
- recurrent constipation
- recurrent abdominal pain
- blood in the stools
- recurrent nausea or vomiting

**Yes** CONSULT YOUR PHYSICIAN WITHOUT DELAY!

A *digestive tract disorder* may be causing your weight loss. Your intestines may be inflamed or you may have an ulcer, but there is also a possibility of a tumor, especially if you are over 40.

**Treatment:** Your physician will probably arrange for a variety of diagnostic tests. These may include analysis of samples of blood (p. 22) and bowel movements, barium X rays (p. 83) and possibly sigmoidoscopy (p. 92).

**No** Have you noticed two or more of the following symptoms?
- profuse sweating at night
- recurrent raised temperature
- general feeling of ill health
- persistent cough
- blood in phlegm
**Yes**  
**CONSULT YOUR PHYSICIAN WITHOUT DELAY!**  
A chronic lung infection, such as tuberculosis or brucellosis, or another chronic infection, is possible.  
**Treatment:** Your physician will probably take samples of blood and phlegm for analysis. You may also be given a chest X-ray (p. 73) and a special skin test for tuberculosis. If you are found to have tuberculosis, you will be given a long course of special medications. With prompt treatment, complete recovery in a few months is probable.

**No**  
Do you have one or more of the following symptoms?  
feeling low or "blue"  
difficulty sleeping  
lack of interest in sex  
inability to concentrate or make decisions  
**Yes** Depression can sometimes cause a marked loss of appetite, leading to weight loss. Go to chart 19 Depression.  
**No** Consult your physician if you are unable to make diagnosis from this chart.

**SIGNS OF WEIGHT LOSS**

If you lose weight without deliberately attempting to slim down, you should always take the matter seriously, especially if other symptoms suggest the possibility of illness. If you do not weigh yourself regularly, the following signs may indicate that you have lost weight:

- People remark on your changed appearance.  
- Your cheeks become sunken.  
- Your skirts or pants become loose around the waist.  
- Your shirt collars become loose.  
- You need a smaller bra size.

**EXERCISE AND WEIGHT LOSS**

For those who are overweight (see p. 27) exercise is a useful accompaniment to a planned reducing diet. While exercise alone will not solve a serious weight problem, it will boost the amount of energy (calories) you burn and will help tone up slack muscles. But if you are already thin, further weight loss may be unhealthy. It is therefore important for those involved in strenuous physical activity—e.g., dancers and athletes to ensure that they eat an adequate diet that takes account of their increased energy requirements.

If you increase your energy output without a corresponding increase in your intake of food, the body burns up fat reserves and the result.
ANOREXIA NERVOSA

Anorexia is a psychological disturbance in which a person (most commonly a teenage girl or young woman) refuses food because of an irrational fear of putting on weight. An anorectic convinces herself that she is too fat, that she has not lost weight even though she has, and that there is nothing wrong with her even when she has lost an excessive amount of weight. Many young women go through a temporary phase of excessive dieting, but only a minority develop anorexia nervosa, which can lead to a dangerous loss of weight, hormonal disturbances and even death.

The signs of anorexia
The illness usually starts with normal dieting, but the anorectic eats less each day. She does this because she thinks that her arms or legs are still too fat. The less she eats, the less she wants to eat and, even if her figure becomes skeletal, she still sees herself as fat and is terrified of putting on weight. She may be reluctant to undress in front of others in order to conceal weight loss. To avoid family pressure to eat sensibly she may hide food and throw it away. Or she may eat a great deal of food and then make herself vomit after meals, a variation of anorexia known as bulimia. Anorectics often take large quantities of laxatives to keep their weight down.

As weight loss progresses, most anorectics cease to have periods. Skin may become sallow and a fine down may appear on the body. Without treatment, many anorectics become severely depressed and in some cases suicidal.

How you can help
If you know someone who has an unrealistic image of herself as being too fat and who seems to be dieting excessively, although already painfully thin, try to persuade her to consult a physician. While she may be unwilling to act on your advice, you should persevere until she does, because this can be a life-threatening condition.

An anorectic sees herself as overweight, even though in reality she is extremely thin.
4. OVERWEIGHT

Normally, fat accounts for no more than 25 percent of the weight of an adult woman. Any more than this is both unnecessary and unhealthy, increasing the risk of diseases such as diabetes, high blood pressure and arthritis. Most people reach their ideal weight in their teens and gradually gain a little weight as they get older, reaching their heaviest at about 50. Consult this chart if you weigh more than the healthy weight for your height shown in the chart below, or if you can pinch a fold of flesh that is more than an inch thick on your abdomen. In most cases, weight gain is due simply to eating more than you need and can be remedied by a balanced reducing diet, but occasionally there may be a medical reason for putting on weight.

Have you been overweight for most of your life?
Yes   Are both your parents overweight?
Yes    A tendency to obesity can run in families. This may be because unhealthy eating habits tend to be passed on to the younger generation. Or it may be that some physical types naturally burn energy more slowly than others and therefore need to eat less.
Self-help: Adopt a sensible weight-reducing diet such as the one suggested in the box on How to lose weight, opposite.
No    Eating more than you need is likely to be the cause of your weight problem.
Self-help: You should aim to take in fewer calories (units of energy) each day than your body burns up (see How to lose weight, opposite).

No    Did you put on weight after giving up smoking?
Yes    Withdrawal of tobacco often causes a temporary gain in weight. This may partly be due to changes in body chemistry, but is more likely to be due to compensatory overeating, especially of sweets.
Self-help: During the first weeks after giving up smoking do not worry about putting on weight. Wait until you have lost your intense craving for tobacco (after about 8 weeks) before adopting a weight-reducing diet (see How to lose weight, opposite).

No    Did you become overweight following pregnancy and childbirth?
Yes    Pregnancy often brings about a weight gain that is difficult to lose once the baby is born, especially if you put on a lot of weight during the pregnancy.
Self-help: The only way to lose weight is to reduce calorie intake by following a weight-reducing diet (see How to lose weight, opposite). However, if you are feeding make sure that there is plenty of nutritious food in your diet, and do not aim for rapid weight loss. You may also need to tone up your muscles. Adopting an exercise routine at home or joining a class will help to restore your figure and help you to keep you physically fit.
No  Did you put on weight at a time when you were depressed or anxious?

Yes  Compulsive eating as a result of psychological stress is a common problem.

Self-help: A gradual reducing diet that helps you adopt healthier long-term eating habits should help you lose your excess weight (see How to lose weight, opposite). However, if you are still suffering from depression or anxiety, you should discuss the problem with your physician first so that the underlying cause of your overeating can be treated.

No  Did the weight gain follow a change from a physically active life or strenuous job to a more sedentary life-style or work?

Yes  Energy requirements of the body vary according to the amount of exercise your daily routine involves. For instance, if you have a desk job, your average daily calorie requirement may be only 2,000 calories. But if you have a more active job you may require 2,500 calories.

Self-help: Adjusting your food intake to take account of your reduced energy requirements should help you to lose the weight you have put on. This may mean changing eating habits you have developed over many years and it may take a little while for you to become accustomed to your new diet. See How to lose weight, right, for some advice on a healthy reducing diet. You should also try to incorporate some physical exercise into your new routine to help keep your muscles firm and to assist weight loss.

No  Have you noticed two or more of the following symptoms since you began to put on weight?
Feeling the cold more than you used to
thinning or brittle hair
dry skin
unexplained tiredness

Yes  Hypothyroidism (underactive thyroid gland), a disorder that is most common in middle-aged women, is a possibility. Consult your physician.

Treatment: If hypothyroidism is diagnosed, your physician will probably prescribe tablets of synthetic thyroid hormones. These tablets will help your body to burn up excess fat and after a few months you should have returned to your normal weight. However, it will probably be necessary to keep on taking the tablets indefinitely.
No  Are you taking any medications?
Yes  Certain drugs, particularly steroids prescribed for problems such as asthma or rheumatoid arthritis, can cause weight gain as a side effect. Discuss the problem with your physician.
No Are you over 40 years old?
Growing older is often accompanied by a gradual gain in weight. This is more than likely because you begin to exercise less at a time in your life when your body is beginning to take longer to burn up food.

**Self-help:** Reduce your food intake to correspond with your lower energy consumption (see *How to lose weight, above*).

Overeating is the likely cause of your excess weight.

**Self-help:** Follow the recommended reducing diet (see *How to lose weight, above*). If after a month you fail to lose weight, consult your physician, who will find out if the problem is clue to any underlying disorder.

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**WEIGHT CHART**

This chart enables you to check your actual weight against the healthy weight for your height. Rule a line across from your height on the left of the chart, and a line up from your weight on the bottom of the chart. If the point where the lines meet is in the colored central band, your weight is healthy for someone of your height.

**HOW TO LOSE WEIGHT**

If you are fat, it is because your body is not using all the energy you feed it. To lose weight you must expend more energy than you take in, first by changing your diet, second by exercising more. It is best to avoid crash diets, which have no lasting effect because they do not encourage you to adopt healthy new habits. You will find it more helpful to follow this step-by-step diet, which is designed to help you change your eating habits over time.

1. Try to cut out, or at least cut down on, all foods in group 1, the sweet or rich foods. Reduce your daily alcohol intake to no more than two 12-oz cans of beer, two 6oz glasses of wine or 2 shots (1.5 oz) of whiskey (or the equivalent). If you drink hard liquor, use low calorie mixers or unsweetened fruit juices. Eat normal portions of food from groups 2 and 3.
2. If you have not lost any weight after 2 weeks, stop having any group 1 foods, halve your helpings of group 2 foods and eat as much as you want from group 3. Cut down further on (or eliminate) your consumption of alcohol.

3. If you fail to lose weight after 2 more weeks, halve your helpings of group 3 foods and eat as little as possible from group 2. Consult your physician if you fail to lose weight after 4 more weeks.
5. DIFFICULTY SLEEPING

It is quite common to have an occasional night when you find it difficult to get to sleep and this need not be a cause for concern. Consult this chart if you regularly have difficulty falling asleep at night or if you wake during the night or early in the morning (a problem sometimes known as insomnia).

Has it been hard for you to fall asleep go to bed at night?
YES Have you been feeling tense during the day?
   YES Go to chart 20. Anxiety
NO Have you been waking during the night or very early morning and finding it difficult to go to sleep again?
   YES When you wake are you unable to keep yourself from brooding about your problems or feelings of failure?
   YES Go to chart 20. Anxiety, 19 Depression, and 18 Disturbing thoughts and feelings
   NO Do you often wake up feeling breathless?
   YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!

A disorder of the heart or lungs may be the cause of breathless attacks at night. If you are under 40, the underlying problem is likely to be asthma (see p. 71). If you are over 40, you may have slight heart failure leading to congestion of the lungs.

   Treatment: If asthma is diagnosed, your physician is likely to prescribe medications to prevent attacks and others to take during attacks. If your physician suspects heart failure, you may be referred for further tests. Drugs to treat heart failure and promote fluid elimination may also be given.

NO Are you pregnant?
YES Mild insomnia during pregnancy may be caused by a number of factors. These include your baby’s movements becoming more noticeable and more violent; difficulty getting comfortable during the later months of pregnancy, particularly if you are used to sleeping on your back or front; having to get up during the night to urinate; worrying about the baby.

   Self-help: If you find it difficult to get to sleep, or if you wake during the night, try not to worry. Get up and walk around for a while, or read and do odd jobs (see Preventing sleeplessness, opposite). Reduce the amount of fluid you drink during the evening. Discuss any worries that you have with your physician; no one will think that you are making a fuss over nothing, if you constantly feel over fired because you do not get enough sleep, consult your physician, who may prescribe a mild sleeping pill for you to take.
NO  On nights when you have difficulty sleeping, have you drunk more coffee or tea than usual?

YES  Caffeine (present in coffee tea, cocoa and certain soft drinks) stimulates the central nervous system. This may make you feel more energetic (see Caffeine, p. 99) and can make it difficult for you to sleep.

Self-help: Try to avoid these drinks in the late afternoon or evening, and make sure that you drink fewer than 2 or 3 cups of coffee each day. Try replacing drinks that contain caffeine with fruit juices. However, do not drink too much fluid (otherwise, you will feel the need to urinate during the night). If you still have trouble sleeping, try cutting out coffee and tea altogether.

NO  On nights when you have difficulty sleeping, have you eaten a late, heavy meal or drunk a lot of alcohol?

YES  Eating or drinking to excess in the evening often causes sleeplessness.

Self-help: Try eating your evening meal earlier and reducing your food and alcohol intake.

NO  Have you recently stopped taking sleeping pills or tranquilizers?

YES  Drugs such as these can disrupt normal sleeping patterns, and it can take several weeks for your body to readjust after you stop taking them (see Sleeping pills, right).

Self-help: Try to be patient and resist the temptation to ask your physician to prescribe more pills to deal with your sleeping problem. Meanwhile, see Preventing sleeplessness, below. If you are still having difficulty sleeping after a month, discuss the problem with your physician.

NO  Do you have a sedentary job and do you take little physical exercise on most days?

YES  Lack of physical exercise during the day may mean that your body is not sufficiently tired to enable you to sleep easily. Also, stress and tension built up during the day may be making it difficult for you to relax.

Self-help: Try to get some form of strenuous exercise during the day or early evening. Not only will this help you sleep better, it will also improve your general health. (See also Sports Injuries, p. 107)

NO  Are you over 60?

YES  A declining need for sleep as you get older is quite normal as long as you continue to feel well.

Self-help: Try to find new activities to fill your extra waking hours. However, if lack of sleep is making you tired or irritable, consult your physician.

NO  Consult your physician if you are unable to make a diagnosis from this chart and if the self-help measures described below do not work.
SLEEP PATTERNS

Most people sleep, on average, 7 to 8 hours each night, though some people need more sleep while others need a good deal less. There is no cause for concern if, for example, you get only 5 to 6 hours sleep, as long as you feel rested and well during the day. There is also no harm in having an occasional restless night; you will make up for this by sleeping longer the following night. However, long periods without sufficient sleep or in which sleep is regularly broke can have a harmful effect on your physical and mental health.

SLEEPING PILLS

If you have difficulty sleeping at night, your physician may prescribe sleeping pills. These may be useful if you cannot sleep because of pain after an injury or curing an illness, or at times of emotional stress - for example, following a bereavement.

What drugs are used?
There are two main types of drug used to treat sleeplessness: antianxiety drugs and barbiturates. Both act in a similar way, but physicians usually prefer to prescribe an antianxiety drug because of the greater danger of overdose with barbiturates.

How do sleeping drugs work?
All sleeping drugs work by suppressing brain function in some way. This means that the sleep you get when taking a sleeping drug is not normal and may leave you less rested than after a natural night's sleep. This also means that if you suddenly stop taking sleeping pills after having used them regularly, you may sleep restlessly and have vivid dreams while your brain readjusts to normal sleep patterns (opposite).

Are sleeping pills dangerous?
Sleeping pills that are taken on your physician's advice and according to the dosage prescribed are unlikely to do you any harm, even if taken for many years. However, you may become dependent on these drugs if you take them regularly. If you wish to stop taking them, discuss this with your physician. In addition you should consult your physician if you have difficulty waking up in the morning or if you find that your sleeping pills no longer work as effectively as before; you may need a change of drug.
People who take sleeping pills should always remember the following safety rules:

1. Never take a larger dose than prescribed.
2. Never drive or operate machinery before the effects of the sleeping drugs have worn off.
3. Never take alcohol with these drugs: stop drinking at least 2 hours before taking a sleeping pill and do not start to drink until at least 8 hours afterward.
4. Never give your sleeping pills to others, especially children.
5. Never keep your tablets on your bedside table: there is a danger that you may accidentally take an additional dose when half asleep.

PREVENTING SLEEPLESSNESS
If you find that you cannot get to sleep as soon as you go to bed, try not to worry about it; this will only make matters worse. Even if you just relax or doze for a few hours you will probably be getting enough rest. The following self-help suggestions may help you get a good night sleep:

1. Try to do some form of physical exercise during the day so that your body needs rest because it is tired. A short, gentle stroll in the open air an hour or so before going to bed may also help.
2. A full stomach is generally not conducive to sleep, a warm milky drink or even a small whiskey (1 ounce or less at bedtime) may help you to feel sleepy.
3. Avoid heavy drinking.
4. A warm bath is often relaxing. A shower may not be a good idea if it is too invigorating.

Recreational reading, which is not associated with work or study, often makes people sleepy.
6. Make sure that you are neither too hot nor too cold. Most people sleep best in a room temperature of 60 to 65°F.
7. Make your environment as conducive to sleep as possible. Make sure that there are no irritating, dripping faucets or knocking radiators. A comfortable bed will help (see Preventing backache, p. 103),
8. Sex may help you relax and fall asleep.
6. FEVER

A fever (an abnormally high body temperature) can be a symptom of many diseases, but usually is a sign that your body is fighting infection. You may suspect that you have a fever if you feel hot or alternately hot, shivery and sweaty, and if you feel sick. To confirm that you have a fever, take your temperature as described below. Consult this chart if your temperature is 100F (38C) or above. Call your physician at once if your temperature rises above 104°F (40°C) or remains elevated for longer than 48 hours - whatever the suspected cause.

Do you have a cough?
YES  Are you short of breath, even when resting, AND/OR have you been coughing up brownish phlegm?
   YES  CALL YOUR PHYSICIAN NOW A chest infection, such as pneumonia, is a possibility. This may be serious, especially for the elderly and those in poor health.
   Treatment: If your physician confirms the diagnosis, he or she will probably recommend that you take measures to reduce your temperature (see How to reduce fever, opposite), and may prescribe antibiotics. Your physician may also arrange for you to have a chest X-ray (p. 73). Hospital admission is sometimes necessary.

NO  Have you been coughing up grayish-yellow phlegm AND/OR have you been wheezing?
YES  Acute bronchitis (infection of the airways in the lungs) is a possibility.
   Self-help: Drink plenty of fluids and follow the advice on how to reduce a fever given in the box opposite. You may also find an over-the-counter cough medicine soothing. Call your physician if you become breathless or if you are no better in 48 hours.

NO  Do you have one or more of the following symptoms?
   · headache
   · aching limbs
   · runny nose
   · sore throat
   YES  A generalized viral infection, such as the flu, is a strong possibility.
   Self-help: Stay in bed and take aspirin or an aspirin substitute to reduce fever and relieve any discomfort (see also How to reduce fever, opposite). Call your physician if you start to feel breathless, or if you are no better in 48 hours.

NO  Do you have a severe headache?
YES  Do you have one or more of the following symptoms?
   · pain when you bend your head forward
   · nausea or vomiting
dislike of bright light
drowsiness or confusion

YES CALL YOUR PHYSICIAN NOW!
Meningitis, Inflammation (due to infection) of the membranes surrounding the brain or spinal cord, may be the cause of such symptoms.

Treatment: You will probably require a lumbar puncture, (opposite). If the infection is found to be bacterial, you will be given antibiotics, possibly by intravenous drip. If the infection is viral, no specific treatment is necessary, but you will be given painkillers and intravenous fluids. Recovery normally takes 2 to 3 weeks.

NO Do you have one or more of the following symptoms?
aching limbs
runny nose
sore throat

YES A generalized viral infection, such as the flu, is a strong possibility.

Self-help: Stay in bed and take aspirin or an aspirin substitute to reduce fever and relieve any discomfort (see also How to reduce fever, opposite). Call your physician if you start to feel breathless, or if you are no better in 48 hours.

NO Do you have a sore throat?

YES A throat infection is likely. Go to chart 33 Sore throat

NO Do you have one or more of the following symptoms?

- pain in the small of the back
- abnormally frequent urination
- pain when passing urine
- pink or cloudy urine

YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
An acute infection of the kidney or bladder may be the cause of this.

Treatment: Your physician will examine you and take a specimen of your urine and may prescribe antibiotics. He or she may also arrange for you to have a special X-ray of the kidneys (see Intravenous pyelography, p 97) to try to find the underlying cause of the problem. Further treatment will depend on the results of the tests.

NO Have you had a baby within the past 2 weeks?

YES CALL YOUR PHYSICIAN NOW!
Puerperal infection, although rare today, is a possible cause of fever following childbirth. This occurs when the uterus and/or vagina become infected after delivery. If, however, you also have pain or redness in the breast, you may have a breast infection (see chart 82, Breastfeeding problems).
**Treatment:** If your physician suspects a puerperal infection, he or she may take a sample of discharge from your vagina for analysis. Treatment includes a course of antibiotics.

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**NO**

Do you have pain in the lower abdomen AND/OR have you had an unusually heavy or unpleasant smelling vaginal discharge?

**YES**

An infection of the fallopian tubes (sometimes known as salpingitis) is a possible cause of such symptoms. Consult your physician.

**Treatment:** Your physician will probably do a vaginal examination (p. 122) and will take a sample of vaginal discharge for analysis. If tests confirm the diagnosis, you will probably be given a course of antibiotics.

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**NO**

Have you spent most of the day in strong sunlight or in very hot conditions?

**YES**

Exposure to heat may cause your temperature to rise. In most cases this is not serious and your temperature will return to normal if you rest for an hour in a cool room. Call your physician at once if the fever continues to rise despite attempts to lower it.

**NO**

Consult your physician if you are unable to make a diagnosis from this chart and your temperature has not returned to normal within 48 hours or if it rises again.

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**HOW TO REDUCE FEVER**

If you have a fever, whatever the suspected cause, the following self-help measures should help to lower your temperature and make you feel more comfortable.

- Take the recommended dose of aspirin or aspirin substitute.
- Drink plenty of cold nonalcoholic fluids.
- Remove excess clothing and rest in a cool room.
- For a high fever, sponge your body with tepid water
- Consult your physician if your temperature continues to rise in spite of these measures.
WARNING

RECURRENT FEVERS
If you have been suffering from recurrent bouts of raised temperature for no apparent reason if you have been sweating profusely at night, especially if you also feel sick, you should seek medical advice. Certain chronic infections and disorders of the lymphatic system can cause such symptoms.

FOREIGN TRAVEL
If you develop an unexplained fever after a stay in a hot country, you should seek your physician’s advice. You may have a tropical disease that is rare in this country and that your physician may not otherwise suspect—for example, malaria or typhoid.

Consult your physician without delay!

HOW TO TAKE YOUR TEMPERATURE
Normal body temperature is about 98.6°F (37°C) but may vary by up to 1 to 2°F (1°C) throughout the day. It is lowest in the early hours of the morning. The best way to take a temperature is by mouth, using a clinical thermometer. Taking your temperature immediately after a bath, a meal, a hot drink or a cigarette may result in a false reading.

Using a thermometer
1. Shake the thermometer toward the bulb with several sharp, downward flicks of the wrist until the mercury level is well below the normal mark.

2. Place the thermometer under your tongue and make sure your mouth is closed. Do not bite the thermometer.

3. Remove the thermometer after 3 minutes and hold it up to the light. The top of the mercury column shows the temperature against the scale.

4. Finally, wash the thermometer in cool water, to which antiseptic has been added, and dry it so that it is ready to use the next time.

LUMBAR PUNCTURE
Lumbar puncture is a test that is used to diagnose disorders of the brain and nervous system, in particular infections such as meningitis. A sample of the fluid that surrounds the brain and spinal cord is taken from the base of the spine for analysis. The area may be first numbed by local anesthetic. Then a needle is inserted between the bones of the lower spine and a small amount of fluid is drained off.
7 EXCESSIVE SWEATING

Sweating is a natural mechanism for regulating body temperature and is the normal response to hot conditions or strenuous exercise. Some people naturally sweat more than others, so, if you have always sweated profusely, there is unlikely to be anything wrong. However, sweating that is not brought on by heat or exercise or that is more profuse than you are used to may be a sign of a number of medical conditions.

Do you sweat on most days?
YES Are you overweight according to the table on p. 26?
YES Obesity may be putting a strain on your body so that even everyday activities can cause excessive sweating. Go to chart 4 Overweight
NO Have you noticed one or more of the following symptoms?
unexplained weight loss
weakness or trembling
increased appetite
bulging eyes
YES Thyrotoxicosis (overactive thyroid gland) is a possibility. Consult your physicians
Treatment: Your physician will probably take some blood for tests (see Blood analysis, p.22) and you may need to have a radioisotope scan (p.24) of the thyroid gland. Treatment usually consists of medications. In severe or recurrent cases, surgery to remove part of the gland may be necessary.
NO Does the sweating occur mainly at night, even though you don't wear much clothing to bed?
YES Do you have a persistent cough AND/OR have you lost weight?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
Tuberculosis (an infection that often starts in the lungs), or another chronic infectious disease, could be the cause of these symptoms.
Treatment: Your physician may arrange for you to have a special test for tuberculosis or a chest X ray (p. 73.) If you are found to have tuberculosis, you will be given a long course of antibiotics. You may need to stay in the hospital until the infection is under control.
NO Do you sometimes become hot and start to sweat for a few minutes?
YES Are you over 45 years old AND/OR have your periods become irregular?
YES Hot flashes (sudden outbreaks of heat and sweating) are one of the most common symptoms of the onset of the menopause.
Self-help: Many women simply tolerate this unpleasant and sometimes embarrassing symptom knowing that it will pass within a year or so. Remember that, although uncomfortable, hot flashes are rarely noticeable to anyone else. However, recent research has indicated that there are other good reasons to treat symptoms associated with menopause. Estrogen hormone replacements, for example, have been shown to reduce osteoporosis, or bone weakness.

NO Is your temperature 100°F (38°C) or above?  

YES Sweating is the normal response to fever. Go to chart 6 Fever

NO Does the excessive sweating occur only during your periods?

YES Changes in the hormone balance cause increased sweating during menstruation in some women. This is no cause for concern.

NO Did you notice the sweating after you had been drinking alcohol or taking large doses of aspirin?

YES Alcohol or aspirin can cause increased sweating.  
Self-help: If alcohol seems to be causing the problem, cut down on your drinking (see The effects of alcohol, p. 22). If aspirin taken for some other problem seems to be the cause of your sweating, ask your physician for advice.

NO Are you wearing clothes (or are your sleep clothes) made of nylon or other man-made materials?

YES Synthetic materials often cause a noticeable increase in sweating. This is because they do not absorb moisture or allow your skin to breathe.  
Self-help: Try wearing natural fibers, such as cotton or wool, as often as possible. In addition, make sure that your clothing is loose, this will increase the circulation of air and allow the sweat to evaporate more quickly.

NO Is the excessive sweating confined to your feet or hands?

YES A high concentration of sweat glands on the hands and feet (see Sweat glands, left) makes these parts of the body react most noticeably to increases in temperature. This is no cause for concern.  
Self-help: If your hands are sweaty, wash them frequently. The problem is likely to become worse if you worry, so try to relax. Make sure that you wash and dry your feet carefully at least once a day. It is best to avoid wearing shoes, hose and socks made of synthetic materials. If the problem is severe or causes embarrassment, consult your physician.
NO Do you notice the sweating only when you are anxious or excited?
YES Emotional stress can easily cause an increase in sweating. This in itself is not a cause for concern, but, if it happens regularly or causes embarrassment, consult your physician.

Treatment: Your physician will advise you on the best methods of controlling the sweating. He or she will also discuss with you the possible causes of any underlying anxiety and may recommend medication. (See also chart 20, Anxiety.)

NO Are you in your teens?
YES The development of additional (apocrine) sweat glands during puberty (see Sweat glands, left) usually causes an increase in sweating that is particularly noticeable under the arms. This is quite normal.

Self-help: There is no need to be embarrassed about any increased sweating. However, you will need to wash regularly and you may want to use an antiperspirant deodorant to reduce wetness and to prevent unpleasant body odor (see Body odor, opposite).

NO Consult your physician if you are unable to make a diagnosis from this chart and your excessive sweating continues to worry you. There is, however, not likely to be a serious cause "or this symptom.
BODY ODOR

Sweat itself usually has no noticeable odor. However, if it remains on the skin for more than a few hours it may lead to body odor. This is caused by the activity of bacteria that live naturally on the surface of the skin. These flourish in the sweat, particularly that of the apocrine glands (see Sweat glands, opposite), which contains fats and proteins.

Preventing body odor

The most effective way to reduce body odor is to wash all over at least once a day. This will remove the stale sweat and control bacterial growth. Using an antibacterial soap, particularly in the areas where apocrine glands are located will also be helpful.

Deodorants and antiperspirants

After washing, use a deodorant containing an antiperspirant, which prevents sweat from reaching the surface of the skin, under the arms. This will usually prevent body odor from building up during the day. Such deodorants may be bought in the form of a spray, a roll-on applicator or a cream. All are equally effective. However, some people may find that their skin becomes irritated by certain chemicals they contain, and you should change brands if this happens to you. Do not use a deodorant on broken skin.

Clothes

If sweat penetrates the fabric of your clothes, they may become a source of unpleasant odor. In addition, the bacteria that cause the odor may also in time damage the material. So, if you sweat a great deal, it is essential to wash clothes (especially those worn next to the skin) frequently.

SWEATGLANDS

Sweat glands are found under the skin all over the body and release moisture (sweat) through pores in the surface of the skin. There are two types of – sweat glands - eccrine and apocrine glands - and these produce different kinds of sweat.

Eccrine glands

Eccrine glands are found all over the body and are active from birth onward. The sweat from these glands is a clear, salty fluid containing various waste chemicals. It evaporates on the surface of the skin to reduce body temperature as necessary. The eccrine glands may also produce sweat in response to anxiety or fear. Eccrine glands are most concentrated on the forehead, palms and soles of the feet (see below), and profuse sweating is likely to become apparent first in these areas.

Apocrine glands

Apocrine glands become active during adolescence. They are mainly concentrated in the armpits, the groin and around the nipples (see below). These glands produce a sticky, milky fluid that contains fats and proteins. The scent from this type of gland is thought to play a role in attracting the opposite sex. However, if it is allowed to remain on the skin for long, it may interact with bacteria to produce a particularly pungent type of body odor (see Body odor, opposite).
8. ITCHING

Itching (skin irritation that makes you want to scratch) is usually produced by contact with certain types of fabric or with a substance to which you are sensitive. Many skin disorders that produce a rash also cause itching.

Occasionally, itching is a sign of an underlying disease or of psychological stress. Irritation is likely to be most severe if you are hot or if your skin is dry, and is likely to be made worse by rubbing or scratching.

Is the itching accompanied by a rash or spots?
YES Go to chart 24 Spots and rashes
NO Is the itching confined to your scalp?
YES Have any bald patches appeared on your scalp?
YES A fungal infection is a possible cause of itching of the scalp and patchy hair loss. Consult your physician.
Treatment: Fungal infection of the scalp is usually treated by an antifungal lotion and possibly a course of antifungal tablets.
NO Dandruff is the most common cause of itching of the scalp, and is especially likely if there is flaking of the scalp as well.
Self-help: Use one of the many over-the-counter antidandruff shampoos every 2 to 3 days. If this does not improve the condition, consult your physician, who may prescribe a different shampoo and/or a lotion to apply to your scalp.
NO Is the itching confined to the anal area?
YES Have you noticed white, thread-like particles in your bowel movements or at your anus?
YES Pinworms may cause such symptoms. These harmless parasites may be passed from one person to another, or may be picked up from contaminated food. Consult your physician!
Treatment: You will probably be given medication to get rid of the worms. This is usually taken in 2 separate doses 2 weeks apart. The whole family may need to be treated. Be especially careful to wash your hands thoroughly after going to the toilet and before preparing food.
NO Pruritus ani is the term used to describe itching around the anus that has no obvious physical cause. Consult your physician!
Treatment: If your physician can find no cause for your itching, he or she will probably suggest the following ways to reduce the irritation. Try to resist the urge to scratch. Wash the anus carefully twice a day, using mild, unscented soap. Use only soft toilet paper and wipe gently. Avoid tight underpants made of
artificial fibers cotton is best. Your physician may also prescribe a soothing ointment.

**NO** Is the itching confined to the area around the vagina and vulva?

**YES** Go to chart 69 GENITAL IRRITATION

**NO** Does your skin AND/OR do the whites of your eyes look yellow?

**YES** Jaundice may be caused by a disorder of the liver or gallbladder and is often accompanied by generalized itching. Consult your physician.

**Treatment:** Your physician will probably arrange for you to have blood tests (see Blood analysis, p.22) and possibly an ultrasound scan (p. 136) to find the cause of the trouble. Treatment will depend on the nature of the underlying disorder.

**NO** Consult your physician if you are unable to make a diagnosis from this chart and your itching persists for longer than 3 days.

**SELF-HELP FOR ITCHY SKIN**

Whatever the cause of your itching, it is important to try to resist the urge to scratch, which will only further inflame and irritate the skin and may lead to infection. Try the following self-help measures:

- Keep your skin cool with frequent lukewarm baths and showers.
- Do not use bath salts or harsh detergents.
- If your skin is dry, apply some oil after your bath and use a moisturizing cream.
- Wear cotton clothing next to the skin, avoid direct contact with wool or nylon.
9. LUMPS AND SWELLINGS

Consult this chart if you notice one or more swollen areas or lumps beneath the surface of the skin. In most cases, such swellings are the result of enlargement of the lymph glands, which is a natural response to the presence of infection. You should always consult your physician about a painful or persistent swelling.

For lumps and swellings in the breast, see chart 63, Breast problems

Is the swelling painful and red?

YES An abscess (an infection causing pus to collect beneath the skin) may be the cause of such a swelling. Consult your physician.

Treatment: Your physician will probably prescribe antibiotics to combat infection and may also decide to cut open (lance) the abscess to release the pus inside. This will relieve the pain.

NO Have you noticed lumps or swellings two or more of the following places?

- neck
- armpit
- groin

YES Infectious mononucleosis, a virus infection, is the most likely diagnosis, especially if you feel sick. However, there is also a slight possibility of a disease affecting the body's ability to fight infection. Consult your physician.

Treatment: Your physician will probably arrange for you to have a blood test (see Blood analysis, p.22). If you are found to have glandular fever, you will probably be advised to rest and to drink plenty of nonalcoholic fluids. Take aspirin or an aspirin substitute to relieve any feverish symptoms. If no infection is found, you may need to have more tests, such as a biopsy (below right) of a lymph gland. Treatment will depend on the eventual diagnosis.

NO Is the swelling on your face between your ear and the angle of the jaw?

YES Mumps, a viral infection that mainly affects the salivary glands, is a possibility. However, there is also a chance that a salivary duct has become blocked by a stone, causing it to swell. Consult your physician.

Treatment: If mumps is diagnosed, you will probably be advised to take aspirin or an aspirin substitute to relieve the discomfort and reduce any fever. If you notice any abdominal pain, it could be a sign that your ovaries have become inflamed. In this case, your physician may prescribe an anti-inflammatory medication. If you are found to have a salivary duct stone, it can usually be removed under local anesthetic.

NO Do you have any lumps or swellings in the neck?

YES Is your throat sore?
YES  Do you have a pink rash on your face or trunk?
   YES  German measles (rubella) is possible, especially if you have not already had the disease.
   Self-help:  German measles needs little treatment other than aspirin or an aspirin substitute to relieve any fever. However, you should stay at home to avoid the possibility of infecting a pregnant woman because of the damage the disease can do to an unborn child. If you want to consult your physician, telephone for an appointment so that you can be seen when there are no pregnant women in the office. If you are, or might be, pregnant, see German measles and pregnancy, p. 59, and consult your physician.

NO  Have you cut or scraped yourself recently?
   YES  An infected wound may cause the nearby lymph glands to swell. This is a natural response and a sign that the body is fighting infection.
   Self-help:  Clean the skin around the cut or scrape using cotton swabs moistened with lukewarm water or a mild antiseptic solution and protect it with an adhesive bandage or a light dressing. Consult your physician if there is any sign of pus, if the wound is painfully inflamed, or if the gland remains swollen after the wound has healed.

NO  Consult your physician if you are unable to make a diagnosis from this chart.

BIOPSY

It is sometimes necessary to remove a small piece of body tissue so that the cells can be analyzed in a laboratory. This procedure is called a biopsy. If an internal organ is being examined, the tissue may be removed by a needle passed through the skin, or the sample may be taken during endoscopy (p. 77). Small skin lumps are usually removed completely.
10. FAINTNESS AND FAINTING

Fainting - a brief loss of consciousness - is usually preceded by a sensation of lightheadedness or dizziness, and you may be pale and suddenly feel cold or clammy. Such feelings of faintness may sometimes occur on their own without loss of consciousness. Faintness is usually the result of a sudden drop in blood pressure - as a result, for example, of an emotional shock - or it may be caused by an abnormally low level of sugar in the blood. Isolated episodes of fainting with no other symptoms are hardly ever a cause for concern but, if you suffer repeated fainting attacks or have additional symptoms, you should seek medical advice.

Was the feeling of faintness accompanied by a spinning sensation?
YES  Go to chart 12 Dizziness
NO  Had you risen suddenly after sitting, lying or bending over?
YES  Postural hypotension, a temporary drop in blood pressure that sometimes occurs when you stand up abruptly, can cause you to feel faint.
   Self-help: If you suffer from this type of faintness, make a habit of rising slowly from a sitting or lying position. This faintness is generally no cause for concern, but you should consult your physician if it happens frequently.

NO  Are you pregnant?
YES  Fainting or feeling faint during pregnancy is a common occurrence. It is probably caused by a lowering of blood pressure as a result of relaxation of the muscles, allowing blood to pool in the lower parts of the body, and an increase in the supply of blood to the uterus.
   Self-help: Avoid standing for long periods of time if possible. If you must remain standing for any reason, move and exercise your feet and legs to stimulate the flow of blood around the body. As soon as you begin to feel faint, sit down, or, if you are already sitting, lie down. If attacks of faintness are frequent, consult your physician.

NO  Are you taking medication for high blood pressure?
YES  Low blood pressure, causing faintness, may result from taking such medication. This probably means that the dosage needs adjustment. Continue taking the medication as prescribed, but consult your physician.

NO  Are you diabetic AND/OR has it been an unusually long time since you last ate something?
YES  Low blood sugar is probably the cause of your faintness, especially if you are taking medication to control your blood sugar. Dizziness, weakness, trembling, blurred speech, tingling in the hands or lips, and headache may occur.
Self-help: If you are prone to attacks of low blood sugar, carry glucose tablets, sugar or candy, and eat them when you feel the symptoms of an attack. A sweet drink (for example, cola or orange juice) or something starchy or sugary will also make you feel better. If you are diabetic and have had several attacks of faintness, consult your physician. Chronic hypoglycemia is best prevented by frequent, small protein snacks.

NO Had you spent several hours in strong sunshine or in very hot or stuffy conditions before you felt faint?

YES Prolonged exposure to heat can cause fainting. See Reducing a raised temperature, p. 31.

NO Have you noticed one or more of the following symptoms since the attack of faintness?
- numbness and/or tingling in any part of the body
- blurred vision
- confusion
- difficulty speaking
- loss of movement in your arms or legs

YES Have these symptoms now disappeared?

YES CONSULT YOUR PHYSICIAN WITHOUT DELAY! A transient ischemic attack - a temporary interruption in the blood supply to the brain, sometimes linked to a narrowing of the arteries (see How blood flows to the brain, opposite) - may have caused your symptoms.

Treatment: If your physician suspects that this is the problem, you will probably be referred to a specialist for tests, including electrocardiography (p.99). At a later stage, you may need to undergo angiography (p. 109) of the arteries. Treatment consists of taking steps to reduce factors that may contribute to narrowing of the arteries. These are discussed in the box on Coronary heart disease (p. 101). You may also be prescribed medication to control high blood pressure, if you have it, and further medication to prevent the formation of blood clots. Surgery may be necessary in some cases.

NO CALL YOUR PHYSICIAN NOW! A stroke, a disruption in the blood supply to the brain, caused by a blocked or burst blood vessel, may be the cause of these symptoms.

Treatment: If your physician suspects that you have had a stroke, admission to the hospital for observation and tests, which may include a CAT (computerized axial tomography) scan (p 39), is customary. If you are found to have had a stroke, you will probably be prescribed medication to prevent further strokes and may be given physical and occupational therapy to help restore any loss of movement. You may also be given medication to control high blood pressure and may be advised to lose weight.

NO Do you have any form of heart disease AND/OR did you notice your heartbeat speed up or slow down before the onset of faintness?
YES  CONSULT YOUR PHYSICIAN WITHOUT DELAY! An Adams-Stokes attack (sudden alteration of the heart rhythm) could have caused the fainting. Such attacks may be a sign of an underlying disorder of heart rate or rhythm. 

Treatment: If your physician suspects the possibility of such a disorder, he or she will arrange for you to undergo electrocardiography (p.99). If this shows abnormal heart rhythms, you will probably be prescribed medication to regulate the heart's activity.

NO Did the faintness follow an emotional shock?
YES Emotional stress can affect the nerves that control blood pressure, causing a drop in pressure that leads to faintness.
NO Are you over 50 years old?
YES Does turning your head or looking upward bring on a feeling of faintness?
YES Cervical osteoarthritis, a disorder of the bones and joints in the neck, can cause feelings of faintness. Consult your physician.
Treatment: See Cervical osteoarthritis, p. 104
NO Have you been passing black, tarry bowel movements?
YES CALL YOUR PHYSICIAN NOW! Bleeding in the digestive tract, perhaps from a stomach ulcer, is a possibility.
Treatment: Your physician will probably arrange for you to have tests, such as endoscopy (p. 77), a biopsy (p. 35) of the stomach lining and a barium X ray (p. 83). These tests should reveal the underlying cause of your symptoms.
NO Consult your physician if you are unable to make a diagnosis from this chart.

WARNING

PROLONGED LOSS OF CONSCIOUSNESS

Momentary loss of consciousness - fainting - is not usually a cause for concern if the person is breathing normally and regains consciousness within a minute or two. If someone in your presence remains unconscious for longer, or if breathing slows or becomes irregular or noisy, get medical help at once. While waiting for medical help to arrive, place the person on her stomach as shown.

FIRST AID
Dealing with faintness
If you feel faint, lie down with your legs raised or, if this is not possible, sit with your head between your knees until you feel better.

Dealing with fainting
To help someone who has fainted, check that breathing is normal. Lay the person on her back with legs raised as high as possible above the level of the head. Hold the legs up, or rest them on a chair. Loosen any tight clothing (e.g., collar or waistband) and make sure that the person gets plenty of fresh air. If you are indoors, open the windows to allow air to circulate. If you are outdoors, make sure that the person is in the shade. When she regains consciousness, it is important that she remain lying down for a few minutes before attempting to get up.
11. **HEADACHE**

From time to time nearly everyone suffers from headaches that develop gradually and clear up after a few hours, leaving no aftereffects. Headaches like this are unlikely to be a sign of any disorder and are usually caused by factors such as tension, tiredness, excessive consumption of alcohol or staying in an overheated or smoke-filled atmosphere. However, a headache that is severe, lasts for more than 24 hours, or recurs several times during one week should be brought to your physician’s attention.

**Is your temperature 100F (38C) or above?**

**YES**  Many illnesses with fever may cause a headache. Go to chart 6 Fever.

**NO**  Have you injured your head within the past few years?

**YES**  Bruising of the brain, or a more serious form of injury, may be the cause of your symptoms. A headache following a minor head injury will probably disappear within a few hours. You should, however, consult your physician to rule out the possibility of more serious damage to the brain or skull if the pain persists for more than a day or so. If you passed out, even for a few seconds, or if you were confused, lost your memory of the accident, or have had recurrent headaches or vomited, seek medical help at once.

**Treatment:** In most cases, no treatment is necessary and your physician will probably advise you to take over-the-counter painkillers to ease the headache. If your physician suspects that you have suffered some internal damage, he or she will advise you to go to the hospital, where you will be fully examined and tests such as a skull X-ray can be carried out. You may be admitted to the hospital and, if necessary, further investigations, including a CAT(computerized axial tomography) scan (opposite), may be performed to determine the extent and nature of the injury. If bleeding inside the skull or fracture of the skull is diagnosed, surgery may be needed.

**NO**  Have you felt nauseated or been vomiting?

**YES**  Did the headache develop before the onset of nausea or vomiting?

**NO**  A headache often follows an attack of vomiting. Go to chart 41 VOMITING

**YES**  Is your vision blurred?

**YES**  CALL YOUR PHYSICIAN NOW!

Acute glaucoma, a serious disorder associated with increased pressure in the eye, is a possibility, especially if you are over 40.

**Treatment:** If your physician confirms the diagnosis, you will probably be given eye drops to allow fluid to drain from the eye. In addition you may be given a diuretic to prevent fluid retention. Once the pressure has been
relieved, an often follows an operation to prevent a recurrence of the problem is sometimes performed.

**NO** Do you have a stuffy nose?

**YES** **Sinusitis** (inflammation of the membranes lining the air spaces in the skull) may be the cause of this problem, although it is possible that you have a common cold.

**Self-help:** Stay inside in a warm and humid atmosphere and take aspirin or an aspirin substitute to relieve the discomfort. If you are no better in 48 hours, consult our physician, who may prescribe antibiotics and decongestants.

**NO** Did the headache occur after you had been reading or doing other close work?

**YES** **Muscle strain** in your neck as a result of poor posture or tension from concentration is the likely cause of your headache (see *Eyestrain, p.60*).

**Self-help:** In order to prevent the problem from recurring, make sure that when you read you are not sitting in an awkward position or in poor light. Periodic rest from whatever you are doing for a few minutes of relaxation will also help. If headaches recur, consult your physician, who may recommend that you have an eye test (*p.62*).

**NO** Are you sleeping poorly AN/OR are you feeling tense or under stress?

**YES** **Tension headaches** are often caused by psychological stress. Go to chart 20 *Anxiety*

**NO** Are you currently taking any medication AND/OR are you taking a birth-control pill?

**YES** **Certain medications** can cause headaches as a side effect. Discuss the problem with your physician. If you are taking the pill and have recurrent headaches, your physician may suggest that you use an alternative form of contraception. See also chart 72. **Choosing a contraceptive method.**

**NO** Consult your physician if you are unable to make a diagnosis from this chart and if the headache persists overnight or if you develop other symptoms.

**NO** Have you suddenly begun to have a severe, throbbing pain in one or both temples?

**YES** **Temporal arteritis**, inflammation of the arteries of the head, is a possibility, especially if you are over 50. Urgent treatment may be needed to prevent this condition from affecting your eyesight.
**Treatment:** Your physician will probably prescribe medication to reduce the inflammation and it may be necessary for you to have regular blood tests to confirm that the treatment is effective.

**NO** Was your vision disturbed in any way before the onset of pain?

**YES** Migraine, a recurrent, severe headache that usually occurs on one side of the head, but may occasionally be on both sides, may be the explanation for your symptoms. Migraines often occur before or during menstruation. They may also be brought on by different "trigger" factors such as stress, eating cheese or chocolate, or drinking red wine. Consult your physician.

**Treatment:** You may find that the pain can be eased by self-help measures (see Relieving headache, opposite). It will also help if you can discover what causes your migraines. Your physician may offer medication if self-help measures are not effective or if the attacks recur.

**NO** CONSULT YOUR PHYSICIAN WITHOUT DELAY! Unexplained headaches, especially if severe and accompanied by additional symptoms such as nausea and vomiting, should always be brought to your physician's attention.

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**RELIEVING HEADACHE**

Most minor headaches can be relieved by the following self-help measures:

- Take the recommended dose of aspirin or an aspirin substitute.
- Take a warm bath to relieve tension.
- Rest in a quiet, darkened room.
- Consult your physician if such measures fail to reduce the pain, or if pain is still present the following day.
A CAT (computerized axial tomography) scan is a safe and painless procedure that helps in the diagnosis of certain conditions. It involves hundreds of tiny X-ray pictures being taken as a camera revolves around the body. The readings are fed into a computer, which assembles them into an accurate picture of the area. CAT scans can be taken of most parts of the body, but they are especially used to diagnose brain disorders.

**CAT scan at eyelid level** This scan shows a cross section of a normal brain at eyelid level. The front of the head is at the top, where the dark areas indicate the eye sockets and air spaces in the skull. The white areas indicate bone.
12. DIZZINESS

Dizziness is a feeling of unsteadiness or that everything around you is spinning. This usually occurs when you have been spinning around - for example, on a merry-go-round. If you feel dizzy for no reason, it may be a symptom of an underlying disorder and should be brought to your physician's attention.

Have you noticed one or more of the following symptoms since you felt dizzy?
- difficulty speaking
- Temporary total or partial loss of vision in one or both eyes
- Weakness in your arms or legs
- numbness and/or tingling in any part or your body

YES  Have all your symptoms now disappeared?

YES  CONSULT YOUR PHYSICIAN WITHOUT DELAY!

A transient ischemic attack - a temporary interruption in the blood supply to the brain, sometimes linked to a narrowing of the arteries (see How blood flows to the brain, p 36) - may have caused your symptoms.

Treatment: If your physician suspects that this is the problem, you will probably need to have tests, including electrocardiography (p. 99). At a later stage, you may need to undergo angiography (p. 109) or ultrasound scanning (p. 136) of the arteries. Treatment consists of taking steps to reduce factors that may contribute to narrowing of the arteries. These are discussed in the box on Coronary heart disease (p. 100). You may also be prescribed medication to control high blood pressure, if you have it, and further medication to prevent the formation of blood clots. Surgery may be necessary in some cases.

NO  CALL YOUR PHYSICIAN NOW!

A stroke, a disruption in the blood supply to the brain caused by a blocked or burst blood vessel may be the cause of these symptoms.

Treatment: If your physician suspects that you have had a stroke, admission to the hospital for observation and tests, which may include a CAT (computerized axial tomography) scan (p. 39.) customary. If you are found to have had a stroke, you will probably be prescribed medication to prevent further strokes and may loss of movement. You may also be given medication to help control high blood pressure and may be advised to lose weight.

NO  Have you been vomiting AND/OR finding it difficult to keep your balance?

YES  Labyrinthitis, inflammation of the part of the inner ear that is responsible for maintaining balance (see How you keep your balance, right) due to viral infection, may cause these symptoms. Consult your physician.

Treatment: Your physician will examine your ears. If labyrinthitis is diagnosed, you will probably be prescribed tranquilizers to alleviate your symptoms and you will be advised to rest quietly in bed for a week or so. Most cases clear up within 3 weeks.

NO  Have you noticed some loss of hearing AND/OR noises in the ear?
YES  Meniere's disease may be the problem. This is a relatively uncommon disorder that occurs when there is an increase in the amount of fluid in the labyrinth (see How you keep your balance, right). Meniere's disease is most common in middle age. Consult your physician.

Treatment: Your physician will probably arrange for you to undergo tests in the hospital to confirm the diagnosis. If you are found to have Meniere's disease, you will probably be given medication to reduce the amount of fluid in the labyrinth. You may be advised to cut down on your intake of salt to reduce the frequency of further attacks. Rarely, an operation is recommended.

NO  Does turning your head or looking upwards bring on dizziness?

YES  Cervical osteoarthritis, a disorder of the bones and joints in the neck that may cause pressure on nearby nerves and blood vessels, may be the cause of this, especially if you are over 50. Consult your physician

Treatment: Your physician may arrange for you to have an X-ray of your neck. If he or she thinks that your dizziness is due to this disorder, you may be given a collar to wear for about 3 months to reduce the mobility of your neck and to relieve pressure on the nerves and blood vessels. Aspirin or an aspirin substitute can be taken to relieve any discomfort.

NO  Consult your physician if you are unable to make a diagnosis from this chart.

HOW YOU KEEP YOUR BALANCE

The brain relies on information from the labyrinth, a structure in the inner ear, to help you to keep your balance. The labyrinth sends messages about your movements to the brain, where they are coordinated with other information from your eyes, limbs and muscles, to assess your exact position so that your body can make adjustments to keep balanced.

The semicircular canals
Each of the three fluid filled semicircular canals that make up the labyrinth lies at a right angle to the other two (above), so that whichever way you move your head - whether you shake it, nod it or tilt it one of the canals will detect this movement and relay the information to the brain.
13 NUMBNESS OR TINGLING

It is normal to experience numbness or tingling if you are cold, sifting in an awkward position or sleeping on an arm. The feeling disappears as soon as you move around and is rarely a circulation problem. Numbness or tingling that occurs without apparent cause may need medical treatment.

Did you notice the numbness and/or tingling after sifting in one position for a long time, or on waking from a deep sleep?
YES Pressing on a nerve, stretching it or temporarily cutting off its blood supply is often the cause of these sensations. Feeling should return to normal in a few minutes.
NO Are only your hands affected?
YES Have you noticed any stiffness in your neck?
YES Cervical osteoarthritis, a disorder of the bones and joints in the neck that may cause pressure on nearby nerves and blood vessels, can be the cause of these sensations, especially if you are over 50. Consult your physician.
 Treatment: Your physician may arrange for you to have an X-ray of the neck. If your symptoms are due to this disorder, you may be given a collar to wear to reduce the mobility of your neck and to relieve pressure on the nerves and blood vessels. Aspirin or an aspirin substitute should be taken to relieve any discomfort.
NO Are the symptoms worse at night AND/OR do you have pains that shoot up the hand from your wrist?
YES Carpal tunnel syndrome, in which nerves in the wrist are pinched due to swelling of surrounding tissues, is a possibility. Consult your physician.
 Treatment: The condition may clear up of its own accord. Your physician may refer you to the hospital for tests to confirm the diagnosis, and you may be given injections of anti-inflammatory drugs into the wrist. If the condition is particularly painful and persistent, a simple operation should relieve it.
NO

NO Does the numbness and/or tingling affect only one side of your body?
YES Have you also noticed one or more of the following symptoms?
- blurred vision
- confusion
- difficulty speaking
- loss of movement in your arms or legs

YES Have all your symptoms now disappeared?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
A transient ischemic attack- a temporary interruption in the blood supply to the brain, sometimes linked to a narrowing of the
arteries (see How blood flows to the brain, p 36) - may have caused your symptoms.

**Treatment:** See Transient ischemic attack, opposite.

**NO CALL YOUR PHYSICIAN NOW!**

A stroke, a disruption in the blood supply to the brain, caused by a blocked or burst blood vessel, may have caused your symptoms.

**Treatment:** See Stroke, opposite.

**NO** Do your fingers or toes go numb and turn blue in cold weather and then turn red and painful as feeling returns?

**YES** Raynaud's syndrome, in which the small blood vessels in the fingers and toes become extra-sensitive to low temperatures, and suddenly contract, reducing the flow of blood to the affected areas, is a likely explanation for this. The condition may occur in people already suffering from poor circulation or in those taking beta-blocker medication. Those who regularly use pneumatic drills or similar tools are particularly vulnerable. Consult your physician.

**Treatment:** If your physician confirms the diagnosis, you may be prescribed medication to improve circulation. Sufferers of this disorder should keep hands and feet warm and dry and avoid smoking. Occasionally, an operation on the nerves that control the contraction of the blood vessels is advised.

**NO** Consult your physician if you are unable to make a diagnosis from this chart and numbness or tingling persist.
14 Twitching and trembling

Consult this chart if you experience any involuntary or uncontrolled movements of any part of your body. Such movements may range from slight twitching to persistent trembling or shaking - for example, of the eyelid, hands, arms or head. In many cases, such movements are no cause for concern, being simply the result of tiredness, stress or an inherited tendency. Occasionally, however, twitching and trembling may be caused by problems that require medical treatment, such as excessive consumption of alcohol, a disorder of the thyroid gland or parkinsonism. Involuntary movements that are accompanied by weakness or stiffness of the affected part of the body should be brought to your physician's attention.

Is your trouble confined to brief, flickering movements of one small part of the body - your eyelid, for example?

YES  **Tiredness or tension** can often cause such minor twitching. This in itself is most unlikely to be a cause for concern.

NO  Are you taking any prescribed medication?

YES  **Certain drugs**, particularly some of those used in the treatment of stomach and psychological disorders, may cause involuntary movements. Discuss the problem with your physician.

NO  Have you been suffering from trembling or shaking movements of any part of the body?

YES  Are you over 55 AND is the trembling worse when the affected part of the body is at rest?

YES  **Parkinson's disease** may cause such trembling. This is a disorder of nerve centers in the brain that control body coordination. Consult your physician.

**Treatment:** If your physician confirms the diagnosis, he or she will probably want to see you every few months to monitor the progress of your condition. In mild cases, specific treatment may not be necessary but, if trembling is severe, you may be offered drugs to relieve your symptoms.

NO  Have you just cut down your alcohol intake after a period of heavy drinking?

YES  **Sudden withdrawal of alcohol** can lead to uncontrolled shaking. This is a sign that you have become dangerously dependent on alcohol. Consult your physician at once (see also The effects of alcohol, p.22).

**Treatment:** Your physician will advise you on the best way of controlling your drinking and may prescribe drugs to relieve unpleasant withdrawal symptoms. You may
also be advised to contact a self-help group for alcoholics, such as Alcoholics Anonymous.

**NO** Have you drunk more than 5 cups of coffee or 10 cups of tea within the past 12 hours?

**YES** Caffeine poisoning in a mild form is a possibility (see *Caffeine*, p. 99),

**Self-help:** Drink no more coffee or tea for the next few hours and your body should return to normal. If you regularly suffer from such symptoms after drinking coffee and tea, or if you have trouble sleeping, it may be advisable to cut down permanently on your regular caffeine intake.

**NO** Have you noticed two or more of the following symptoms?

- excessive sweating
- unexplained tiredness
- bulging eyes
- unexplained weight loss

**YES** **Thyrotoxicosis** (overactive thyroid gland) may cause trembling and shaking. Consult your physician.

**Treatment:** Your physician will probably take some blood for tests (see *Blood analysis*, p. 22) and you may need to have a radioisotope scan (p. 24) of the thyroid gland. Treatment usually consists of drugs, radioactive iodine or surgery to remove part of the gland.

**NO** A tendency to tremble or shake may be inherited. The symptoms may be brought on by stress or anxiety. Consult your physician.

**Treatment:** Your physician may check your general health to reassure you that nothing is wrong. If necessary, he or she may prescribe an *anti anxiety drug* to relieve your symptoms.

**NO** **Consult your physician** if you are to make a diagnosis from this chart.
15 Pain in the face

Consult this chart if you have pain or discomfort that is limited to the area of the face and/or forehead. Facial pain may be dull and throbbing or sharp and stabbing. It is usually caused by infection or inflammation of the underlying tissues. Although it may be distressing, it is not often a sign of a serious disorder.

Do you have, or have you recently had, a red, blistery rash where you now feel pain?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
   Shingles, a virus infection of the nerves, is a possibility. Prompt medical attention is needed because the infection may affect the eyes.
   Treatment: Your physician will probably prescribe painkillers and a soothing ointment to put on the skin, and possibly an antiviral agent. In addition, you may need treatment to protect the eyes.
NO   Do you have severe pain radiating from the eye?
YES   Go to chart 27 Painful or irritated eye
NO   Is the pain localized between the eye and the nose on one side of the face?
YES   Are the nose and the affected eye runny, and is the pain severe, steady, episodic and lasting an hour or less?
   YES  A cluster headache, a type of migraine, may cause these symptoms. Consult your physician.
   Treatment: If you suffer repeatedly from this type of headache, try to find out whether any particular food or another factor seems to trigger the pain. Self-help measures may relieve the pain (see Relieving headache, p. 38), but your physician will be able to offer a more effective medication.
   NO   Do you have a dull pain and tenderness around the eyes or cheekbones that worsens when you bend forward?
YES   Sinusitis, inflammation (that may follow a cold) of the membranes lining the air spaces in the skull, may be the cause of the pain.
   Self-help: Stay inside in a warm and humid atmosphere and take aspirin or an aspirin substitute to relieve the discomfort. If you are no better in 2 to 3 days, consult your physician, who may prescribe antibiotics.
NO   Have you suddenly begun to have a severe, throbbing pain in one or both temples?
YES   Have you been feeling sick AND/OR is your scalp sensitive to the touch?
   YES  CONSULT YOUR PHYSICIAN WITHOUT DELAY!
   Temporal arteritis, inflammation of the arteries in the head, is a possibility, especially if you are over 50. Urgent treatment may be needed to
prevent this condition from affecting your eyesight.

**Treatment:** Your physician will probably prescribe medication to reduce the inflammation and it may be necessary to have regular blood tests to confirm that the treatment is effective.

**NO** Do you have a severe, stabbing pain on one side of the face, brought on by touching the face or by chewing?

**YES** Trigeminal neuralgia may be the problem. Consult your physician.

**Treatment:** Your physician will probably examine your sinuses and ears, and may suggest that you have a dental examination, because infections in the sinuses, ears or teeth can cause similar pain. If your you are found to have trigeminal neuralgia, your physician will probably prescribe medication to be taken in steadily increasing doses. When pain stops, are steadily reduced. In some cases a minor operation may be performed.

**NO** Consult your physician if you are unable to make a diagnosis from this chart.
16. FORGETFULNESS AND CONFUSION

We all suffer from mild forgetfulness and, to a lesser extent, confusion from time to time. Often such "absentmindedness" happens because we are tense or preoccupied. This is no cause for concern. However, if confusion comes on suddenly or if forgetfulness and confusion are so severe that they disrupt everyday life, there may be an underlying medical disorder. This chart deals with sudden or severe confusion or forgetfulness that you are aware of in yourself or in a relative or friend who may not be aware of the problem. Remember that loss of memory for recent events is a natural aging phenomenon. Its onset occurs at different ages.

Has the confusion or forgetfulness developed suddenly during the past few hours?
YES Have you injured your head within the past few days or weeks?
YES CALL YOUR PHYSICIAN NOW! Bruising of the brain, or a more serious form of damage, may cause confusion. If the confusion was mild and immediately followed the injury, serious damage is unlikely. But severe confusion that develops some time after the injury may be a sign of bleeding inside the skull. Prompt medical attention is essential after any significant head injury.
Treatment: Your physician may advise that you be fully examined. You may be admitted to the hospital and, if necessary, further tests including a CAT(computed axial tomography) scan (p. 39), maybe performed to determine the extent and nature of the injury. If bleeding inside the skull is diagnosed, an operation may be needed.
NO Have you noticed one or more of the following symptoms?
numbness and/or tingling in any part of the body
blurred vision
difficulty speaking
loss of movement in your arms or legs
YES Have these symptoms now disappeared?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
A transient ischemic attack - a temporary interruption in the blood supply to the brain, sometimes linked to a narrowing of the arteries (see How blood flows to the brain, p.36) - may have caused your symptoms.
Treatment: If your physician suspects that this is the problem, you will probably be referred to a specialist for tests, including electrocardiography (p. 99). At a later stage, you may need to undergo angiography (p. 109) and/or ultrasound scanning (p. 136) of the arteries. Treatment consists of taking steps to reduce factors that may contribute to narrowing of the arteries. These are discussed in the box on Coronary heart disease (p 101). You may also be prescribed medication to control high blood pressure, if you have it and further medication to prevent the formation of blood clots. Surgery may be necessary in some cases.
A stroke, a disruption in the blood supply to the brain, caused by a blocked or burst blood vessel, may have caused your forgetfulness and confusion.

**Treatment:** If your physician suspects that you have had a stroke, admission to the hospital for observation and tests such as a CAT scan (p.39) is customary. If you are found to have had a stroke, you will probably be prescribed medication to help prevent further strokes and may be given physical and occupational therapy to restore any loss of movement. You may also be given medication to control high blood pressure and may be advised to lose weight.

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**CALL YOUR PHYSICIAN NOW!**

A high fever can cause confusion. While waiting for medical help, follow the advice on lowering a raised temperature (p.31). See also chart 6 Fever

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**CALL YOUR PHYSICIAN NOW!**

Sudden worsening of any of these disorders can cause confusion. If you suspect that diabetes is the cause of the problem, eating or drinking something sweet may help to relieve the confusion.

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**CALL YOUR PHYSICIAN NOW!**

Certain medications, especially certain sedatives, can cause forgetfulness and confusion. Discuss the problem with your physician.

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If you regularly drink enough alcohol to make you confused, you should try to cut down on your drinking because of the danger of alcoholism. If you find it hard to reduce your alcohol intake, have difficulty sleeping without the help of alcohol, or if you have suffered from total loss of memory (blackouts) on several occasions, consult your physician.

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Has memory loss and/or confusion developed gradually over the past few months or years?

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Have you noticed two or more of the following symptoms?

- inability to cope with everyday matters
- change in personality
- decline in standards of hygiene
- difficulty following complex conversations and instructions
YES  **Dementia**, when the brain ceases to function normally, is most common in people over 65 but may occur in younger people. Sometimes there may be an underlying cause of the problem, such as an infection, diabetes, stroke, heart trouble or hypothermia. Other times the cause may be a disorder known as Alzheimer's disease. Seek medical advice.

**Treatment:** Your physician will carry out a physical examination to find out if there is an underlying disease. If such a disease is found, treatment of that disorder should relieve the confusion. If no other disorder is found, your physician will be able to suggest ways of coping with the problem and will provide information about community services.

NO  **Absentmindedness** that occurs only occasionally is unlikely to be a cause for medical concern. Consult your physician, however, if you are worried, or if forgetfulness and confusion are disrupting your everyday life.

NO  Is the loss of memory total?

YES  **Hysteria**, a form of overreaction to an experience or situation, may be the cause. It may be triggered by an event that the sufferer wants to forget. Seek medical advice.

**Treatment:** Hysteria is extremely difficult to diagnose. Tests will probably be needed to make sure that the problem is not physical. If no physical disorder is found, tests to uncover any underlying emotional cause of the hysteria will be needed. This may involve psychotherapy (p.49). Tranquilizers may be prescribed. In older persons, memory may suddenly be lost for several hours, followed by recovery. This is called "transient global amnesia."

NO  **Consult your physician** if you are unable to make a diagnosis from this chart.

**WARNING**

**SERIOUSLY DISTURBED BEHAVIOR**

If a friend or relative becomes severely confused, agitated, or disoriented, or is seeing or hearing nonexistent things, medical attention is required immediately.

**Call your physician now!**
17. DIFFICULTY SPEAKING

Consult this chart if you have difficulty finding, using or defining words, or if your speech becomes slurred or unclear. Such speech difficulties may be related to disorders or medication affecting the speech centers in the brain or they may be due to a disorder affecting the movement of the mouth or tongue.

Have you noticed one or more of the following symptoms since the onset of your speech difficulty?
- Dizziness
- Weakness in your arms or legs
- Numbness and/or tingling in any part of your body
- Blurred or loss of vision

YES Have all your symptoms now disappeared?

YES  CONSULT YOUR PHYSICIAN WITHOUT DELAY!

A transient ischemic attack a temporary interruption in the blood supply to the brain, sometimes linked to a narrowing of the arteries (see How blood flows to the brain, p.36) – may have caused your symptoms.

Treatment: If your physician suspects that this is the problem, you will probably be referred to a specialist for tests, electrocardiography (p. 99). At a later stage you may need to undergo angiography (p. 109) and/or an ultrasound scan (p. 136) of the arteries. Treatment consists of taking steps to reduce factors that may contribute to narrowing of the arteries These are discussed in the box on Coronary heart disease (p. 101). You may also be prescribed medication to control high blood pressure, it you have it, and further medication to prevent the formation of blood clots. Surgery may be necessary in some cases.

NO  CALL YOUR PHYSICIAN NOW!  A stroke, a disruption in the blood supply to the brain, caused by a blocked or burst blood vessel, may be the cause of these symptoms.

Treatment: It your physician suspects that you have had a stroke, admission to the hospital for observation and tests, which may include a CAT (computerized axial tomography) scan (p.39) is customary. If you are found to have had a stroke, you will probably be prescribed medication to help prevent further strokes and may be given speech therapy to help overcome your speech difficulty. Physical and occupational therapy will probably be ordered also. You may also be given medication to control high blood pressure and may be advised to lose weight.

NO  Are you unable to speak clearly because of pain or swelling in the mouth or tongue?

YES  Go to chart 40 Sore mouth or tongue

NO  Have you been drinking alcohol?

YES  Excessive consumption of alcohol frequently makes speech slurred and difficult to understand, as well as having many other adverse effects on the body (see The effects of alcohol, p. 22).

Self-help:  Your speech should gradually return to normal as the effect of the alcohol wears off if you regularly drink enough alcohol to
affect the clarity of your speech, you may be an alcoholic and should make an effort to stop your alcohol intake. If you have difficulty stopping or if you have difficulty sleeping without the help of alcohol, consult your physician.

NO Is speech difficult because you are unable to move the muscles on one side of your face?

YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Bell's palsy, a temporary disorder of the facial nerve that controls the muscles used in facial expression, may be causing this problem. This condition normally comes on suddenly, often overnight, and it is sometimes accompanied by pain in the ear.

Treatment: if your physician confirms the diagnosis, he or she may prescribe a course of adrenal steroid medication. You may need to wear a protective eye patch and to apply moisturizing drops to the eye. If recovery occurs, it may take several weeks.

NO Are you taking any medication?

YES Certain medications can affect your speech as a side effect. Discuss the problem with your physician.

NO Are you sometimes unable to speak even though you know what you want to say AND/OR do you sometimes get stuck at the beginning of a word and find yourself repeating the first consonant for several seconds before you can get the word out?

YES Stuttering may be brought on or made worse by anxiety, particularly if you had this trouble in early childhood.

Self-help: Many stutterers find that their speech improves if they try to relax and speak more slowly. If your stutter is so severe that it makes communication difficult, consult your physician, who may refer you to a speech therapist.

NO CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Unexplained difficulty speaking may be an early sign of an underlying disorder of the brain or nervous system and early treatment is important.
18. Disturbing thoughts and feelings

Consult this chart if you begin to have thoughts and feelings that worry you or that seem to you or to others to be abnormal or unhealthy. Such feelings may include aggressive or sexual thoughts and unfamiliar or uncontrolled emotions. If your thoughts and feelings continue to worry you, whatever your particular problem, talk to your physician, who may be able to help you put your feelings into proper context and offer treatment where appropriate. Simply talking about your problem may make you feel better.

Have you had one or more of the following thoughts and feelings?
- a feeling of guilt, worthlessness or futility
- feeling that people do not like you or are conspiring against you
- a feeling that your body is rotting away
- thoughts of suicide

YES Depression commonly produces such feelings.
  Go to chart 19 Depression

NO Do you feel apprehensive, tense, restless or on edge?
  YES Go to chart 20 Anxiety
  NO Have you been having sexual thoughts that you are worried might be unhealthy?
  YES Are you worried because you are sexually attracted to other women?
    YES Homosexuality (lesbianism) is a form of sexual preference for some of the population. The main problems arise from feelings of guilt or anxiety that many women have about their homosexuality. See Sexual orientation, p. 129.

    NO Sexual fantasies of all sorts are common and usually harmless. For many people such fantasies are an integral part of sexual arousal and enjoyment, and can often be shared with their partners. However, if you feel the urge to act out sexual fantasies involving violence or children, consult your physician.

  NO Are you seriously worried about your health, even though your physician reassures you that he or she can find no physical illness?
    YES Hypochondriasis is a possibility. If you suffer from this condition, you are extremely worried about your health to such an extent that you are constantly aware of the internal workings of your body. This problem may be caused by an underlying problem such as anxiety or depression.

Self-help: If you are constantly worried that you have a serious illness, and you cannot be convinced by your physician that this is not the case, ask for a second opinion. If this does not dispel your fears, then try to accept that you may have a psychological problem. Treatment of any underlying anxiety or depression may cure the condition. Your physician may prescribe tranquilizers or advise you to undergo some form of psychotherapy (p.49).
NO  Are you disturbed by uncharacteristically violent or aggressive thoughts, for example, toward your husband, children or friends?
YES  Aggression is a natural response to disappointment, rejection or humiliation. If you are under stress for any other reason (see What is stress? p. 51), your aggressive reactions are likely to be exaggerated. However, if you can find no obvious reason for feeling aggressive, or if your reaction seems out of proportion or controls consult your physician.
NO  Consult your physician if you are unable to make a diagnosis from this chart and the feelings still worry you.
19. DEPRESSION

Most people have minor ups and downs in mood, feeling particularly good one day but low the next. This is often due to an identifiable cause, and quickly passes. More severe depression, characterized by feelings of futility and guilt and often with physical symptoms such as headache, insomnia, lack of appetite, loss of weight, constipation and delusion, is sometimes brought on by some major event, such as bereavement, divorce or becoming unemployed. Some people, however, are prone to repeated attacks of depression that have no apparent cause. Also, there are certain times when we are more susceptible to depression - for instance, during adolescence, after having a baby, at middle age and at retirement.

As well as feeling low or "blue," do you have two or more of the following symptoms?
difficulty sleeping
loss of appetite
loss of energy
loss of interest in sex
recurrent headaches

YES  A depressive illness is a possibility. This often develops with no apparent cause and, in the most severe cases, it may be accompanied by severe psychological symptoms such as feelings of persecution, guilt and worthlessness. Some sufferers lose all energy and enthusiasm, sleep poorly and wake early. A severely depressed person may contemplate suicide. Consult your physician if you are experiencing these feelings. A threat of suicide should always be taken seriously, even if such threats have been made before (see Suicide, below).

Treatment: This depends on the type and severity of your symptoms. Your physician may refer you to a specialist for treatment that is likely to consist of a combination of drugs and psychotherapy (opposite). Antidepressants, if prescribed, usually begin to relieve mild depression in 2 or 3 weeks. If you are severely depressed, the specialist may recommend that you spend some time in the hospital.

NO  Did the onset of depression follow a bereavement?

YES  Grief over the death of someone you have loved may naturally lead to a period of depression. This time of mourning is an essential part of the process of adjustment to the loss and should not be unnaturally hurried by well-meaning family and friends. During this period many people think they see or hear the dead person and this is perfectly normal.

Self-help: Do not expect to return to normal within a few days or weeks. Many people take months to accept their loss. Do not, however believe that you must not give in or that admitting to unhappiness is a sign of weakness. If depression is preventing you from coping with everyday life, or if you have difficulty sleeping, consult your physician. Sometimes antidepressants or tranquilizers are helpful.

NO  Did your depression follow a distressing event, such as a divorce or losing your job?
**YES** Distressing events are often followed by a period of depression. This is known as reactive depression. Some people react more severely than others. If your depression makes life unbearable, prevents you from coping with everyday life, begins to get worse or if your friends are clearly worried about you, consult your physician.  
**Treatment:** This depends on the type and the severity of your symptoms. Your physician may prescribe antidepressants, which will usually relieve a mild depression in 2 to 3 weeks. If you are severely depressed, you may be referred to a specialist for treatment, which is likely to consist of a combination of drugs and psychotherapy (opposite). In some cases, it may be necessary to spend some time in the hospital, where treatment can be supervised.

**NO** Have you been under strain at work or at home?  
**YES** Generalized stress (see What is stress? p. 51) may be the cause, especially if you have felt under pressure for a long period.  
**Self-help:** Try to keep stress to a minimum by avoiding major upheavals in your life as much as possible. Discuss your feelings with a close friend and listen to his or her advice about how you might cope with your problems. Devote some time every day to physical relaxation that diverts your mind from day-to-day strain and worry. Keep your alcohol consumption down. Also, follow the advice on getting a good night's sleep (see Preventing sleeplessness, p. 29). Consult your physician if you feel that the self-help measures are not working, or if your depression seems to be getting worse.

**NO** Have you recently had a baby?  
**YES** Go to chart 83 Depression after childbirth  
**NO** Do you feel depressed or irritable in the days before your period?  
**YES** Premenstrual syndrome (PMS) is a common occurrence. It can vary from anything as mild as a feeling of moderate unhappiness to a depression so severe that it affects all bodily functions. It is often accompanied by increased irritability, aggression and physical symptoms such as a slight increase in weight, lower abdominal pain, bloated stomach and swollen ankles, which makes matters worse (see The menstrual cycle, p. 117). If your symptoms are severe enough to interfere with your day-to-day routine, consult your physician.  
**Treatment:** Your physician will reassure you and advise you to keep premenstrual days as nonstressful as possible. He or she may also prescribe drugs, counteract the physical symptoms (see Treatment of menstrual problems, p.119).

**NO** Have you recently recovered from an infectious illness, such as the flu or glandular fever?  
**YES** Infectious illnesses are often followed by a period of depression.  
**Self-help:** Do not try to return to your normal routine too quickly after you have had such an illness. Make sure that you eat well and get plenty of sleep to allow your strength to build up. If your depression lasts longer than 2 weeks, consult your physician, who may prescribe an antidepressant.
NO  Have you been drinking alcohol every day for a prolonged period?

YES  Regular consumption of alcohol, even in seemingly moderate amounts over a period of time, has a depressive effect on the body and mind, and this may persist on days when you have had no alcohol (see The effects of alcohol, p.22).

Self-help: Your depression should clear if you stop drinking alcohol. If you find it difficult to cut down on the amount of alcohol you drink, or your depression persists or begins to get worse, consult your physician.

NO  Are you between 40 and 55 years old?

YES  Emotional instability in the years surrounding the menopause may be the cause of your depression. Social and psychological factors such as fear of approaching old age and curtailment of opportunities for advancement in your job may contribute to depression. A further complication is the hormonal upheaval that takes place at this age, sometimes with unpleasant symptoms such as hot flashes and dryness or itching of the vagina (see Menopause, p. 116).

Self-help: Try to accept that the menopause is a natural fact of life. Discuss your feelings with your partner or with friends in a similar position. You may find it helpful to find new interests - for example, starting a job. If you have not been working, or taking up a new hobby. Maintain your physical health by ensuring that you do not become overweight (see How to lose weight, p.27) and exercise regularly (see Sports injuries, p. 107). If these measures do not work, or if your depression is so severe that you cannot cope, consult your physician, who will examine you to make sure that there is no underlying condition. He or she may recommend hormone replacement therapy (see Menopause, p. 116) and possibly, an antidepressant.

NO  Are you currently taking any medication?

YES  Certain drugs, especially sedatives, can cause depression. Discuss the problem with your physician.

NO  Consult your physician if you are unable to a cause for your depression from this chart.

PSYCHOTHERAPY

Psychotherapy is the treatment of psychological problems by a therapist who encourages you to talk about your feelings and fears, and who can provide expert help and advice. This process may range from talking about your troubles with your own physician, to an extended course of
psychoanalysis with a psychiatrist. The more common forms of psychotherapy are described here.

Group therapy
This involves a number of sessions during which the therapist guides a discussion among a group of people with a problem in common. The advantage of group psychotherapy is that the members of the group gain strength from knowing that other people have the same problem and that they can learn from each other's experiences. There is also a certain amount of group pressure to develop a healthier attitude to personal problems and group support for this attitude to continue.

Behavior therapy
This is usually used in the treatment of specific phobias, such as fear of flying, or fear of dogs or spiders. In one form of behavior therapy known as desensitization, the sufferer is gradually helped by the therapist to overcome the fear. For example, in the case of fear of flying, the therapist encourages you to imagine the events associated with the flight-taking a bus to the airport, waiting in the terminal, dealing with the ticket agent, boarding, and finally sitting on the plane while it taxis on the runway, takes off and lands. Later, when you actually come to fly, you will feel as though you have been through it before and it will hold no fear for you.

Another method, called flooding, involves a confrontation, under the supervision of your therapist, with the object of your fears in an extreme form - for example, a confrontation with a dog as treatment for fear of dogs. Experiencing the worst imaginable degree of exposure helps you to realize that all along there has been no real danger involved and that your fear has been exaggerated. Both methods should be attempted only under the guidance of a trained therapist.

Psychoanalysis
This form of psychotherapy, based on the belief that much human behavior is determined by early childhood developed in the late 19th and early 20th centuries. Psychoanalysis involves a series of meetings with a psychoanalyst during which he or she will encourage you to talk at will. He or she may ask occasional questions to guide the direction of your thoughts. By listening to your recollections, thoughts and feelings. He or she may be able to pinpoint the root of your problem and, through discussion, enable you to reach a better understanding of yourself and help you reconcile any internal conflicts.

WARNING

SUICIDE
Medical help should be sought at once if you (or someone you know) feel so depressed that you think that life is not worthwhile, or if you have contemplated suicide discussed it with relatives or friends. The Samaritans, a voluntary organization specializing in helping people who are contemplating suicide, are available on the telephone 24 hours a day to offer support. Or look in the telephone book under 'Suicide Prevention Service,' Seek medical help without delay!
20. ANXIETY

If you are suffering from anxiety, you will feel tense and unable to concentrate, think clearly or
sleep well. Some people have headaches, chest pains, palpitations, backache, abdominal
distress and a general feeling of tiredness. This is often a natural reaction to a stressful
situation and is only temporary. Other people, however, suffer from anxiety that comes on
without apparent cause and persists for long periods.

Do you feel anxious most of the time?

YES Have you become anxious since attempting to give up tobacco, alcohol or drugs (such
as tranquilizers or sleeping pills)?

YES Sudden withdrawal of these substances may precipitate feelings of anxiety.
Consult your physician.

Treatment: Your physician will advise you on the best way to deal with your
addiction and monitor your progress. He or she may prescribe a short course of
medication to help alleviate anxiety during the withdrawal period. In order to
reduce the possibility of you reverting to addiction, it may be necessary for you
to undergo some form of psychotherapy (p. 49). Your physician will be able to
put you in touch with one of the many self-help organizations that exist, where
you will be able to talk about your problems with people in the same position.
This way you will gain strength from hearing about how other people have
coped with the same problem.

NO Have you recently had a major upset in your life, such as a divorce or losing your
job?

YES Stress, as a result of this major upset, is probably making you feel
anxious (see What is stress? opposite).

Self-help: It is important to minimize your general stress level it you
have recently suffered a major upset in your life (for instance, if you
have just been divorced, changed jobs or are taking on new
responsibilities). Make sure that you eat regular meals and do not drink
too much alcohol otherwise, your body may be put under more strain
(see The effects of stress, opposite). If your anxiety becomes so severe
that you feel that You can no longer cope with everyday life, consult
your physician.

NO Have you lost weight AND/OR do your eyes seem to be bulging?

YES Thyrotoxicosis (overactive thyroid gland) is a possibility.
Consult your physicians

Treatment: Your physician will probably take some blood for
tests (see Blood analysis, p. 22) and you may need to have a
radioisotope scan (p. 24) of the thyroid gland. Treatment consists
of drugs. In other cases, radioactive iodine or surgery to remove part of the gland may be advised.

**NO** Do you have any problems related to your sex life?

**YES** Anxiety about sex is a common occurrence. Possible causes of worry may include fear of pregnancy or of contracting a sexually transmitted disease. Or you may be concerned about a specific sex problem such as pain during intercourse or a difficulty affecting your partner.

**Self-help:** If you have a regular partner, discuss your feelings. Talking about sex openly is often the best way to solve and alleviate feelings of anxiety. It is important that you be aware of your partner's feelings and vice versa. If this does not help because you are unable to communicate satisfactorily with each other, or you do not have a regular partner with whom you can talk, consult your physician, who will be able to offer helpful advice or possibly refer you for sex counseling (p. 128). For diagnosis of specific sex problems, see the Sex and fertility charts, pp. 125-132.

**NO** Do you feel anxious in certain social situations - for instance, meeting people, going to parties or during interviews?

**YES** Social anxiety is a natural feeling that will improve with time and with experience of these situations. If the problem interferes to such an extent that you avoid certain types of social contact because of anxiety, consult your physician.

**Treatment:** He or she may prescribe a mild tranquilizer to be taken just before you enter any social situation where you will feel anxious (until you gain enough confidence to do without). If your physician feels that your anxiety is severe, he or she may suggest that you undergo psychotherapy (p. 49) to help you overcome the problem.

**NO** Do you feel anxious only when confronted with specific objects of fear or if you are prevented from doing things in your usual way?

**YES** A phobia or compulsive disorder may cause your anxiety. A phobia is an irrational fear of a specific object or situation. For instance, you may have a fear of enclosed spaces (claustrophobia). If you have a compulsive disorder, you feel an irresistible, a need to behave in a certain fashion, even though you may know that it is unreasonable. For example, you may feel that you have to walk to work on the same side of the street and, if prevented from doing so, you worry about it. Consult your physician.

**Treatment:** Your physician will try to discover the underlying cause of the problem and may be able to reassure you that your worries and fears are understandable but it is possible to come to terms with them. He or she may decide that antidepressants or tranquilizers will help. If your symptoms are severe, he or she may refer you for psychotherapy (p. 49).

**NO** Consult your physician if you are unable to make a diagnosis from this chart and unexplained feelings of anxiety persists.
WHAT IS STRESS?

Stress refers to physical or mental demands that require an increased response from the body. Stress can be caused by changes in daily routine, including changes for the better - getting married or having a baby - as well as for the worse - losing a job or getting divorced. The greater the change, the more stress you will suffer. A single major event such as the death of a close relative may, on its own, equal the stress resulting from an accumulation of smaller changes such as a change in job responsibilities, a move to a new house or a vacation overseas.

The effects of stress

A certain amount of stress can be beneficial when it excites and simulates the body and improves performance. However, as stress levels continue to rise, helpful stimulation becomes replaced by fatigue and, if stress is not reduced, may increase susceptibility to physical and mental illness. Everybody has a different level of tolerance to stress; some people never seem to suffer harmful effects from seemingly high levels of stress in their lives, while others can cope with only a few changes at a time without becoming anxious, depressed or physically ill.

Some of the most common disorders that may be caused by or made worse by stress are:
- Mental and emotional problems, including anxiety and depression
- Asthma
- Mouth ulcers
- Angina and some other heart conditions
- Stomach or duodenal ulcers
- Ulcerative colitis, irritable bowel
- Stuttering
- Skin problems, including eczema and psoriasis
- Cessation of periods
- Certain forms of hair loss

RELAXATION TECHNIQUES

Some people manage to remain relaxed and easygoing no matter how much strain they are under at work or at home. Others become tense and worried as a result of even minor stresses (see What is stress? above). If you are one of the latter type, learning to relax may help mitigate the harmful effects of stress and enable you to cope with problems more easily. Try practicing some of the simple relaxation techniques described below once or twice a day. See also Preventing sleeplessness (p. 29).

Breathing exercises

Try taking deep rather than shallow breaths. To develop the habit, sit or lie in a comfortable position and breathe deeply and slowly for one minute, counting the number of breaths you take. Try to reduce your breathing rate so that you take half as many breaths as you normally do during a minute. Try this twice daily.
Meditation

Meditation involves emptying the mind of all distractions, thoughts and worries. Try the following method:

1. Find a quiet part of the house and sit in a comfortable chair with your eyes closed.

2. Without moving your lips, repeat a word silently to self, paying attention only to this action. Do not a word that has any emotional overtones. If your mind wanders, do not fight this new train of thought but continue to focus your attention on the unspoken sound of the word. (Some people find it easier to concentrate on something visual - a door knob or a vase of - rather than a word).

3. Do this for 5 minutes twice a day for a week, then gradually increase the meditation period until you can manage about 20 minutes at each session.

WARNING

PANIC ATTACKS
People suffering from severe anxiety sometimes experience sudden attacks of fear combined with physical symptoms such as breathlessness, palpitations and sweating. These attacks are sometimes so severe that they may be mistaken for a heart attack. If you are in any doubt about the cause of such symptoms, treat the condition as an emergency and follow the first-aid measures on p. 37.
21. HAIR AND SCALP PROBLEMS

Hair grows over the whole surface of the human body, except the palms and soles, and grows especially thickly on the head, in the armpits and in the genital area. Your hair color and type are inherited, but your hair's condition may be affected by your overall health, your diet and the environment. This chart pinpoints common problems affecting hair on the head and the condition of the scalp.

Has your hair become generally thin?

YES Has thinning occurred 2 to 3 months after one of the following events?
   a prolonged or serious illness
   childbirth
   stopping the birth-control pill
   a crash diet

YES Temporary hair loss often occurs in such circumstances. Your hair should return to normal within the next few months without special treatment.

NO Are you taking any medications?

YES Certain medications can cause temporary hair loss as a side effect. Discuss the problem with your physician.

NO Do you have one or more of the following symptoms?
   Unexplained tiredness
   Unexplained weight gain
   feeling the cold more than you used to

YES Hypothyroidism (underactive thyroid gland), a problem that is most likely to occur in middle-aged women, is a possibility. Consult your physician.

   Treatment: If hypothyroidism is diagnosed, your physician will probably prescribe tablets of synthetic thyroid hormones. These tablets will make you feel much better in a few days, and after a few months you should have returned to normal health. However, it will be necessary to keep taking the tablets for an indefinite period.

NO Has the hair loss taken place slowly over many years?

YES Mild thinning of the hair as you grow older is common, especially after the menopause (see p. 116).

   Self-help: Treat your hair gently, avoid excessive use of chemicals (permanents-and dyes) or of heat on your hair. If hair loss is extensive, consult your physician.

NO Do you frequently use any of the following hairdressing techniques?
   tight braiding
   curling with heated tongs or rollers
Hairdressing methods such as these may damage your hair.

Self-help: Your hair will probably regain its former thickness if you adopt a more natural hairstyle. It may be advisable to cut your hair short if it is severely damaged.

NO Have one or more bald patches suddenly developed?
YES Patchy hair loss may be the result of fungal infection (especially if the scalp is inflamed and itchy) or of alopecia areata (a condition that may be related to emotional stress). Consult your physician.

Treatment: Fungal infection of the scalp is usually treated by an antifungal lotion and possibly a course of antifungal tablets. Alopecia areata often clears up without treatment and new hair grows within 6 to 9 months.

NO Is your scalp flaky and/or itchy?
YES Dandruff is the name used to describe excessive flaking and itching of the scalp. It may be caused by seborrhoeic dermatitis (see Eczema, p.57) or, less commonly, by psoriasis.

Self-help: Use one of the many over-the-counter antidandruff shampoos every 2 to 3 days. If this does not improve the condition, consult your physician, who may prescribe a different shampoo and/or a lotion to apply to your scalp.

NO Consult your physician if you are unable to make a diagnosis from this chart.

HAIR CARE
There is no need to wash your hair more than twice a week unless it gets particularly dirty or oily. If you do like to wash your hair more frequently, make sure that you use a mild shampoo or you may wash out the natural oils that your scalp produces to protect your hair. If you suffer from dandruff, choose an antidandruff shampoo.

How to wash your hair properly
Wet your hair completely and apply a small amount of shampoo. Work this gently but thoroughly into a lather with your fingertips and massage your scalp for a minute or two. Rinse thoroughly with warm, clean water. If your hair is very dirty, repeat this procedure. After shampooing, you may wish to use a conditioner that makes your hair easier to comb. If you do, make sure that you rinse it out thoroughly. Pat your hair dry with a towel. If there are any tangles, loosen them with your fingers, and then comb through gently with a wide-toothed comb, allowing your hair to dry naturally, if possible. Excessive use of hair dryers and heated rollers may damage your hair.
22. NAIL PROBLEMS

Fingernails and toenails are made of hard, dead tissue called keratin that protects the sensitive tips of the fingers and toes from damage. Any abnormalities or diseases affecting the nails may be unsightly and irritating, but they are not harmful to health. Trim your nails regularly.

Is the skin around or underneath the nail swollen or inflamed and painful?

YES  Is only your big toe affected?

YES An ingrown toenail may be the cause of the problem. Go to chart 62 Foot problems.

NO Paronychia, an infection of the skin adjacent to the nail, may be the cause of this problem. This is particularly likely if you spend a lot of time with your hands in water - for instance, washing clothes or dishes. Consult your physician.

Treatment: Your physician may prescribe an antibiotic or antifungal cream or paint to apply to the affected nail after each time you wet your hands. Avoid putting your hands in water too often. Wear rubber gloves, if necessary. Your nails and cuticles should return to normal after a few months.

NO Do you have a nail that has become discolored, thickened and flaky?

YES A fungal infection of the nail is a possibility, especially if one or more of your toenails is affected. Consult your physician.

Treatment: Your physician may send a sample of nail clippings to be examined in a laboratory to confirm the diagnosis. Treatment may include a long course of antifungal tablets.

NO Have your nails become pitted or dimpled?

YES Psoriasis of the nails may cause this. In severe cases, the nail is loosened from the nail bed. The skin may also be affected by the disease when thick patches of silvery-white, scaly skin appear. Consult your physician.

Treatment: Your physician will probably advise you to keep your nails short. Nail polish will disguise unsightly nails and may protect them from further damage. If your skin is affected by psoriasis, your physician may prescribe an adrenal steroid cream and ultraviolet treatment.

NO Do your nails crack or break easily?

YES A tendency to brittle nails is usually inherited, but may be exacerbated by excessive exposure to water, detergents and harsh chemicals.

Self-help: Wear rubber gloves whenever you have to put your hands in water or handle chemicals or detergents. Keep your nails short and, if you like, apply a protective coat of nail polish. Regular applications of hand cream may also be helpful.

NO Consult your physician if you are unable to make a diagnosis from this chart.
23 GENERAL SKIN PROBLEMS

Many different types of disorders may affect the skin, including infections, inflammation, abnormal cell growth and abnormal skin coloration. Such disorders may be the result of an internal disease, exposure to an irritant or some other external factor. Symptoms may include blemishes, lumps, rashes, change in skin coloring or texture, itching or discomfort. Consult this chart if your symptom is not covered elsewhere in this book.

Do you have a red rash?
YES Is your temperature (38°C) or above?
  YES Go to chart 26 Rash with fever
  NO Go to chart 24 Spots and rashes
NO Do you have one or more raised lumps or raised blemish on your skin?
  YES Go to chart 25 Raised spots or lumps on the skin
  NO Is your skin itchy or irritated without there being any change in its appearance?
    YES Go to chart 8 Itching
    NO Do you have one or more of the following symptoms on your face, chest or back?
      Blackheads
      raised blemishes with white centers
      painful, red lumps under the skin
    YES Acne, which occurs when hair follicles (see Structure of the skin, p. 57) become blocked by excess keratin, is likely. This disorder usually starts during adolescence, when hormonal changes alter the composition of the sebum, but often persists into adulthood. See Acne, opposite.
    NO Do you have sore areas around your mouth that are red and rough or blistered?
      YES Cold sores are the likely cause of these symptoms. These are the result of the herpes simplex virus in the body becoming reactivated by a cold, or by exposure to strong sunshine or cold weather.
      Self-help: Mild cold sores clear up of their own accord. However, there are many over-the-counter lotions that may hasten healing. If you are troubled by severe, recurrent cold sores, your physician may prescribe a cream to inhibit their development. Applying an ice cube to the area as soon as you feel a cold sore may also prevent it from developing. Avoid infecting others by preventing direct skin contact with the infected area.
NO  Does your face become unnaturally flushed when you are under stress or after you have been drinking alcohol or eating spicy foods?

YES  **Rosacea**, in which the nose and cheeks flush easily, may cause an acne-like condition of the skin. The condition is harmless and mainly affects middle-aged people. If it causes you embarrassment, consult your physician.

**Treatment:** Your physician may prescribe a course of antibiotics to help improve the condition of your skin, although they will not prevent flushing. The condition may well recur after you have finished the course of antibiotics and, in this case, you should return to your physician.

NO  Have you recently noticed a new mole or a change in one you have had since childhood?

YES  **CONSULT YOUR PHYSICIAN WITHOUT DELAY!**

**Moles,** small, sometimes raised, pigmented spots, normally do not appear for the first time or change after age 35. Most moles are harmless, but when changes occur there is a slight possibility of a malignant melanoma, a form of skin cancer.

**Treatment:** Even if your physician thinks that the mole is harmless, he or she may still decide to have it removed and examined under a microscope (see Biopsy, p. 35) for signs of cancerous cells. If cancer is confirmed, the growth will be removed, together with a wide margin of adjacent skin. A skin graft to cover the whole area will probably be carried out at the same period.

**WARNING**

**CHANGES IN THE SKIN**

Any of the following symptoms may, in some cases, be a sign of skin cancer:

- an open sore that has not healed within 3 weeks
- a slowly growing lump
- a change in a long-standing mole
- a newly pigmented spot or patch

Consult your physician without delay!
24. SPOTS AND RASHES

DO YOU HAVE A WIDESPREAD, ITCHY RASH?
YES Have you noticed tiny gray lines or red infected looking spots between your fingers or on your wrists?
YES Scabies: a parasitic infection, may be causing these symptoms. This is especially likely if others in the household have the same problem. Consult your physician.

Treatment: If your physician diagnoses scabies, you will need to apply a prescribed insecticide to the whole of your body. The procedure should be repeated a few days later. Bedding and clothing should be thoroughly laundered.

NO Have you recently started to take any medication?
YES Certain medications may cause rashes as a side effect. Discuss the problem with your physician.

NO Consult your physician if you are unable to make a diagnosis from this chart.

STRUCTURE OF THE SKIN
Skin consists of two layers. The surface layer is known as the epidermis. Active cells at its base are continuously dividing to produce new cells, which gradually die as they fill up with a hard substance, keratin. As each cell dies, it moves up toward the surface of the skin, to be shed or worn away. This production of cells at the base of the epidermis is carefully balanced with the loss of cells at the surface of the skin. If the rate of cell replacement is altered, a skin problem develops. For instance, in psoriasis there is an abnormal buildup of surface cells being produced and pushed up from the base of the epidermis.

The underlying layer, the dermis, contains the many specialized structures that allow the skin to function properly. Here, sebaceous glands produce sebum, a waxy substance that helps to keep the surface of the skin supple. Sweat glands produce perspiration to cool you when you are hot (see Sweat glands, p 33). And the small blood vessels dilate in hot weather (so that the body can lose heat) and contract in cold weather (to retain heat).

BRUISING
A bruise is a discolored area of skin caused by blood leaking into the dermis (see Structure of the skin, above) from a blood vessel damaged by injury. A bruise is usually blue purple or black at first but gradually fades to yellow before disappearing.

Self-help
If you have a bruise, do not rub or massage the bruised area, this may make matters worse. Applying an ice bag (r an unopened packet of frozen vegetables) immediately after the injury may reduce the extent of bruising. If you have bruised your leg, resting with your feet up may assist healing.
When to consult your physician
Consult your physician in any of the following circumstances:

If you feel severe pain, or if movement is restricted.
If bruises appear without injury
If you bruise frequently and easily

ECZEMA
Eczema (dermatitis) refers to a group of related condition the skin becomes inflamed and itchy. The main types are described below.

Infantile (atopic) eczema
This is an allergic condition that usually appears for the first time in early infancy. It tends to get less severe and may clear up completely by early adolescence. Infantile eczema usually affects the wrists, insides of the elbows, and backs of the knees but, in severe cases, the whole body may be affected. The usual treatment is to avoid harsh soaps and detergents, to use a special soap substitute and to apply oil after the bath. A rich, moisturizing cream should be applied to the affected areas. If itching is severe, your physician may prescribe medication. Mild steroid creams are recommended in some cases and, if the eczema becomes infected, a mixed steroid and antibiotic cream or antibiotics by mouth may be necessary. Skin tests may be carried out to identify factors that trigger outbreaks. Going on a special diet may help.

Contact eczema
This type of eczema is caused by a reaction to contact with a substance to which you are allergic. Certain plants, such as poison ivy or poison oak, are common causes. The skin becomes red and itchy and blisters (which break and crust over) may form. Milder forms of contact eczema may be caused by contact with certain metals - for example, nickel used in jewelry or on a watch. The rash will clear up in a week or so if the cause of the trouble is removed.

Irritant eczema
As the name suggests, this type of rash is caused by contact with irritant chemicals - for example, harsh detergents or industrial chemicals in your place of work. The skin becomes dry, red, rough and itchy. The condition usually clears up if you avoid contact with the irritants by protecting your hands with gloves. A moisturizing hand cream should soothe the affected skin, but it is advisable to consult your physician, who may prescribe a mild steroid cream to clear up the rash.

Seborrheic dermatitis
The tendency to develop this type of eczema is probably inherited. Flaky, red, but not especially itchy, patches appear in areas with a high concentration of sebaceous glands (see Structure of the skin, above left), such as around the nose, eyebrows or on the scalp and chest. Seborrheic dermatitis on the scalp is the most common cause of dandruff. Keep the affected skin clean and dry, but avoid using harsh soaps or detergents. Further treatment is often unnecessary but, if the rash is extensive, consult your physician, who may prescribe a mild cream or ointment.
25. RAISED SPOTS OR LUMPS ON THE SKIN

Consult this chart if you develop any raised lumps, whether they are skin colored or pigmented (brown). In the majority of cases, such lumps are the harmless result of virus infection. Your physician will be willing to give you advice on the problem if skin lumps persist, cause you discomfort or embarrassment.

Have you recently noticed a new, dark, mole-like spot on your skin?
YES Does it have a greasy appearance?
YES A seborrheic keratosis is the most likely diagnosis. This type of keratosis is common and harmless and often appears on the skin in large number, in later life. Such a keratosis can vary in size from to 3 cm. However, you should show it to your, physician so that the diagnosis can be confirmed.

Treatment: Seborrheic keratoses need no treatment, but your physician may decide to have it removed and examined under a microscope (see Biopsy, p.35).

NO CONSULT YOUR PHYSICIAN WITHOUT DELAY! Moles, small, sometimes raised, pigmented spots, normally do not appear for the first time or change after age 35. Most moles are harmless, but when changes occur, there is a slight possibility of a malignant melanoma, a form of skin cancer.

Treatment: Your physician may be able to reassure you that the mole is harmless. If unsure of the diagnosis, he or she may refer you to a specialist for a biopsy (p.35) in order to find out whether or not there is an underlying disorder. If cancerous cells are found, they will be removed together with a wide margin of adjacent skin. A skin graft to cover the whole area will probably be carried out at the same time.

NO Have you noticed a change in the look of any mole that you have had since childhood?
YES NO Have small, hard, white or pink lumps anywhere on your body that have a roughened cauliflower-like surface?
YES Are these on your hands or feet?
YES Common warts develop when a virus invades the skin cells and causes them to multiply rapidly. Wart viruses spread by touch or from contact with the skin shed from a wart. When they appear on the feet they are often referred to as plantar warts and can be very painful when pressure is put on them.

Self-help: Most warts disappear naturally in time but if you find them a nuisance apply one of the wart remedies that are available over-the-counter in the form of cream or paint. These preparations should be applied very carefully, following the manufacturer's instructions, because they can make surrounding skin sore. Afterward, the dead skin should be removed with a
pumice stone. If you have a wart that does not respond to this treatment ask your physician for advice. He or she may refer you to a skin specialist who may remove the wart, by freezing it with liquid nitrogen or carbon dioxide or by burning it off (diathermy).

NO Are they on your genitals or around the anus?

YES Anogenital warts are caused by virus infection. They often grow quite quickly and can be irritating. Usually they are transmitted by sexual contact, though this is not always the case. They may disappear spontaneously, but often recur. Do not attempt to treat this condition yourself with over-the-counter preparations, because the skin is very sensitive in these areas. Consult your physician.

Treatment: Your physician may prescribe a preparation in the form of cream or paint to apply to the warts. He or she will probably advise you to keep the affected area as clean and dry as possible with regular washing with a mild soap and then patting dry. He or she may also examine you to rule out the possibility of a sexually transmitted disease and advise you to avoid sexual contact until the warts have disappeared.

NO Consult your physician if you are unable to make a diagnosis from this chart.

NO Do you have a smooth, pale lump beneath the skin?

YES A sebaceous cyst that occurs when a lining of skin becomes filled with a thick “cheesy” material may be the cause of this. The scalp is a common site. Such cysts are usually harmless, but may sometimes become infected. If the lump becomes painful and red, or if it is unsightly, consult your physician.

Treatment: If the cyst is infected, your physician will probably prescribe antibiotics. Sometimes it is advisable to remove a cyst. This will be done under a local anesthetic at the office or minor surgery room.

NO Consult your physician if you are unable to make a diagnosis from this chart.
26. RASH WITH FEVER

Consult this chart if you notice any blemishes or discolored areas of skin and also have a temperature of 100°F (38°C) or above. You may well have one of the infectious diseases that are more common in childhood.

Do you have raised, red, itchy spots that turn into blisters?
YES  **Chickenpox**, childhood infectious disease caused by the herpes varicella-zoster virus, is the likely cause of such symptoms. The rash usually starts on the face and trunk, but later may spread to the limbs.

_**Self-help:**_ Drink plenty of fluids are take aspirin or an aspirin substitute to relieve any fever symptoms. Apply calamine lotion to the rash to relieve itching. Try to resist the urge to scratch because scratching leads to scarring. Consult your physician if you are, or might be pregnant, if your temperature rises above 104°F (40°C), if you develop a severe cough, if your eyes become painful, or if you find it hard not to scratch. You are infectious until all the blisters have formed scabs (after about a week).

NO  Do you have a rash of dull-red spots or blotches?

YES  Do you have two or more of the following symptoms?
- runny nose
- cough
- sore, red eyes

YES  **Measles (rubeola)**, a highly contagious viral disease, may be the cause of such symptoms, especially if you did not have measles as a child.

_**Self-help:**_ There is no specific treatment for measles. Stay at home, drink plenty of fluids and take aspirin or an aspirin substitute to reduce fever. Consult your physician if you are, or might be, pregnant, if you develop a severe headache or earache, or if your cough starts to get worse.

NO  Do you have a rash of pink spots?

YES  **German measles (rubella)** is possible, especially if the glands in the back and sides of your neck are swollen and you have not already had the disease or been vaccinated against it.

_**Self-help:**_ German measles is a mild disease and generally needs little treatment other than aspirin or an aspirin substitute to relieve any fever. However, you should stay at home to avoid the possibility of infecting a pregnant woman because of the damage the disease can do to the unborn child. If you want to consult your physician, telephone for an appointment so that your physician can arrange to see you when there are no pregnant women in the office. Recovery normally takes about a week. If you are, or might be, pregnant, see German measles and pregnancy (right) and consult your physician.

NO  Do you have a rash of purple spots?
YES  CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Purpura, a type of rash caused by blood leaking from blood vessels under the skin, may be produced by an allergic reaction to a food or medication, or by infection. Call your physician at once if your temperature rises to 104°F (40°C), or if you are suffering from a headache, stiff neck and/or are vomiting.

Treatment: You will probably be admitted to the hospital for a blood test (see Blood analysis, o. 22) and possibly a lumbar puncture (p.30) to determine the exact nature of the disorder. Further treatment will depend on the results of these tests.

NO  Consult Your Physician if

GERMAN MEASLES AND PREGNANCY

The virus responsible for German measles may cross the placenta of a pregnant woman loping fetus, causing defects such as deafness, blindness and heart problems. The likelihood of damage occurring is strongest if the disease develops in the first 12 weeks of pregnancy. If you are pregnant or trying to become pregnant, it is vitally important to avoid contracting this disease.

In most cases you will be given a blood test in early pregnancy to see whether you are immune. If this test shows that you are at risk of the disease, be careful to avoid anyone who has the disease or has recently been in contact with it.

Rash and fever in pregnancy
If you develop an unexplained rash during pregnancy, especially if you also feel feverish or sick, consult your physician at once. Analysis of blood samples will confirm whether or not you have had German measles. If a diagnosis of German measles is confirmed, your physician will discuss the risks to the baby in your case and, depending on factors such as the stage of pregnancy, your age and your religious and moral convictions, will advise you whether or not elective abortion (p.131) should be considered.

Immunization
If you have had German measles you are probably immune to the disease. However, it is advisable for any woman who has not been vaccinated against the disease in childhood to have a test to confirm whether or not she is immune and, if not, to be immunized. This is especially important if you are thinking of starting a family. Once you have been immunized, you should be sure to take effective contraceptive precautions for 3 months after the vaccination, because within this period the vaccine itself may possibly damage the fetus.
27. PAINFUL OR IRRITATED EYE

Pain or irritation in or around the eye may be caused by disorders of the eye or surrounding tissues or injury to the eye area. Infection and inflammation are the common causes of eye discomfort. Disorders that threaten sight or that endanger health are uncommon, but should always be ruled out by your physician.

Have you injured your eye?
YES   EMERGENCY
GET MEDICAL HELP NOW!
Damage to the eye always requires immediate expert treatment.
Treatment: Carry out first aid (opposite) and get to the emergency room of your local hospital where specialist help will be available or contact your ophthalmologist.

NO   Is there a foreign body - for example, a piece of dirt - in the eye?
YES    A foreign body in the eye may cause pain, redness and watering. Carry out first aid (opposite). If first aid is not possible, or if it is unsuccessful, seek medical help.

NO   Is your vision blurred AND/OR do you see halos around lights?
YES    CALL YOUR PHYSICIAN NOW!
Acute glaucoma (narrow angle glaucoma) a serious disorder in which excess fluid inside the eye causes increased pressure, is a possible cause of the pain, especially if you are over 40.
Treatment: If your physician suspects that you have this disorder, you will probably be referred to an ophthalmologist for treatment. Treatment usually consists of eye drops to enable excess fluid to drain from the eye. In addition, you may be given a drug to prevent fluid retention. Once the pressure has been relieved an operation to prevent a recurrence is usually carried out.

NO   Is the white of the eye bloodshot?
YES   Is there a sticky discharge from the eye?
YES    Conjunctivitis (inflammation of the membrane that covers the eye and lines the eyelids) caused by infection is the probable cause of such symptoms. Consult your physician.
Treatment: Your physician will probably prescribe antibiotic eye drops or ointment. Keep your eyes free of discharge by regularly wiping the discharge away with a clean, moistened cotton ball. Keep your towels and washcloths separate to prevent the spread of infection to others.

NO   Does the eyelid seem to be turning inward?
YES    Entropion, a condition in which the eyelid (usually the lower lid) turns inward so that the
lashes rub on the surface of the eyeball, is a possibility, especially if you are over 60. Consult your physician.

**Treatment:** Your physician will examine your eyes and remove any stray eyelashes. This often relieves the problem. Sometimes, however, a minor operation to correct the defect is undertaken.

**NO** Is the eye painful rather than irritated?

**YES** **CONSULT YOUR PHYSICIAN WITHOUT DELAY!**

**Iritis:** inflammation of the iris, is a possibility.

**Treatment:** Your physician will probably prescribe eye drops or ointment to reduce inflammation. Another type of eye drop to enlarge the pupil and prevent damage to the lens may also be given. Sometimes tablets are prescribed to prevent an increase in pressure within the eye.

**NO**

**NO**

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**EYESTRAIN**

Reading for long periods or doing close work in poor light can cause fatigue but won't damage the eyes. Occasional headaches after such activities are more likely to be the result of tension from concentration and possibly muscle strain caused by poor posture. However, regular headaches when reading may be a sign that your vision is defective, so you should arrange for an eye examination (p.62).

Are your eyelids red and itchy?

**YES** **Blepharitis** (inflammation and scaling of the lid margins) may cause itchy eyelids and occurs with [dandruff](#). Consult your physician.

**Treatment:** Your physician may prescribe ointment to apply to the lids; and recommend bathing the leads in warm salt water. Treat dandruff by using an antidandruff shampoo.

**NO** Do you have a red lump on the eyelid?

**YES** **A sty** (chalazion), a boil-like infection at the base of an eyelash, is likely.

**Self-help:** A sty will usually either burst, and release pus, or dry up within a week without special treatment other than warm soaks. If the sty bursts, carefully wipe away the pus using a clean moistened cotton ball each time
you wipe. Consult your physician if a sty fails to heal within a week, the eye itself becomes red and painful, or if sties recur.

NO Consult your physician if you are unable to make a diagnosis from this chart.

Has your eye been watering?

YES Eye irritation may be caused by exposure to chemical fumes, or by an allergic reaction (for example to eye make-up or to pollen), or it may be caused by viral conjunctivitis.

Self-help: There is no specific treatment for any of these conditions. Avoiding the irritant in the first two cases will bring relief. However, it may be difficult to trace an allergen. Your physician may be able to help. Viral conjunctivitis will get better without treatments but while it persists you will need to be careful to avoid spreading the infection to others. So keep a separate towel and washcloth.

NO Dry eye, a condition in which the eye fails to produce enough tears, is possible. Consult your physician.

Treatment: If dry eye is confirmed, your physician will prescribe eye drops of artificial tears, which you can use as frequently as you like in order to reduce discomfort.

FIRST AID FOR EYE INJURIES

If you suffer an injury to your eye or eyelid, rapid action is essential. Except in the case of a foreign body that has been successfully removed, go to the emergency room of your local hospital or to an ophthalmologist by the fastest means possible, as soon as you have carried out first aid.

Cuts to the eye or eyelid
Cover the eye with a clean pad (such as a folded handkerchief) and hold it lightly in place with a bandage. Apply no pressure. Cover the other eye as well to prevent movement of the eyeball. Seek medical help.

Blows to the eye area
Carry out first aid as for a cut eye (above) but use a cold compress instead of a dry pad over the injured eye.

Corrosive chemicals
If you spill any harsh chemical (for example bleach or household cleaner in the eye, immediately flood the eye large quantities of running water. Tilt your head with the injured eye downward so that the water runs from the inside outward. Keep the eyelids apart with your fingers. When all the traces of the chemical have been removed, lightly cover the eye with a clean pad and seek medical help.
Foreign body in the eye
Never attempt to remove any of the following:
  an object that is embedded in the eyeball
  a chip of metal
  a particle over the colored can of the eye
28. DISTURBED OR IMPAIRED VISION

This chart deals with any change in your vision, including blurring, seeing double, seeing flashing lights or floating spots, and loss of part or all of your field of vision. Any such change in vision should be brought to your physician's attention promptly to rule out the possibility of a sight-threatening eye disorder. Successful treatment of many eye disorders may depend on catching the disease in its early stages.

Have you suddenly lost all or part of the field of vision in one or both eyes?

YES  **EMERGENCY GET MEDICAL HELP NOW!**

Blockage of one of the major blood vessels to the brain or to the eye, a retinal detachment, a vitreous hemorrhage or diabetic retinopathy may cause sudden loss of vision.

**Treatment:** You will probably be admitted to the hospital for tests and treatments. In some cases, an operation may be necessary.

NO  Is your vision generally blurred?

YES  Do you have pain in the eyes?

YES  **CALL YOUR PHYSICIAN NOW!**

**Acute glaucoma** (narrow angle glaucoma) is possibility, especially if you are over 40. This is a serious disorder in which obstruction to the normal draining mechanism causes a build up of fluid and a consequent increase of pressure in the eye.

**Treatment:** If your physician suspects this disorder, you will probably be referred to an ophthalmologist for treatment. Treatment usually consists of drugs to help lower the pressure within the eye and to relieve pain. You will also probably be given eye drops to help fluid drain from the eye. Later on you may need to have an operation to prevent a recurrence of the problem.

NO  Has the blurring come on suddenly?

YES  **CALL YOUR PHYSICIAN NOW!**  Several serious eye disorders cause sudden blurring of vision.

**Treatment:** Your physician will probably refer you to an ophthalmologist for tests to determine the cause of the problem. Treatment will depend on the nature of the underlying disorder.

NO  Are you diabetic?

YES  **Diabetic retinopathy,** in which the tiny fragile blood vessels of the eye are damaged, allowing blood to leak into the eye, is possible. Consult your physician.

**Treatment:** If you are found to have diabetic retinopathy, it may be possible to repair the damaged blood vessels by laser treatment.
NO Are you over 50?
YES Cataracts, which cloud the lens of the eye, or macular degeneration (deterioration of part of the retina) are tooth possible causes of blurred vision in this age group. Consult your physician!
Treatment: If you have a mild cataract, you may need only to have special glasses. In more severe cases, an operation to remove the affected lens and replace it with a plastic lens is often recommended. Macular degeneration another cause of impaired vision, can in some cases be halted by laser treatment. In other cases, special glasses may improve vision.

NO A variety of eye disorders may cause blurring of vision. Consult your physician who may refer you to an ophthalmologist for tests and treatment.

NO Have you developed double vision?
YES Do your eyes seem to be bulging or staring?
YES Exophthalmos, a condition in which the eyes protrude, is a possibility. Consult your physician.
Treatment: Your physician will probably arrange for tests to find out if an underlying disorder, such as an overactive thyroid gland (thyrotoxicosis), is causing this condition. Treatment of thyrotoxicosis may consist of radioactive iodine, other medications or surgery.

NO An eye muscle problem may have developed. This is the result of a lack of coordination between the muscles responsible for the movement of both eyes. Consult your physician.
Treatment: Your physician will probably arrange for you to have tests to find the underlying cause for the problem. These may include measuring your blood pressure, blood and urine analysis, a skull X-ray, and possibly a CAT(computerized axial tomography) scan of the brain. While you are awaiting the results of such tests, your physician may suggest that you wear a patch over one eye to prevent double vision. Long-term treatment will depend on the underlying cause of the strabismus.

NO Have you been seeing flashing lights, floating spots AND/OR suffering other visual disturbances?
YES Has this happened before AND did a severe headache follow?
YES  **Migraine** (recurrent severe headaches) may be preceded by a warning period in which you may experience visual disturbances. Consult your physician.

**Treatment:** If you suffer from migraines regularly, try to find out if any particular food or other factor seems to trigger the headaches, so that you can avoid it. The self-help measures may help to relieve the pain. Your physician will be able to offer more effective drug treatment if the attacks recur.

NO  **CONSULT YOUR PHYSICIAN WITHOUT DELAY!** Retinal detachment, a disorder in which the lining of the back of the eye is torn, may symptoms in its early stages.

**Treatment:** The earlier treatment of this problem is started, the greater the chance of success. If the disorder is in its early stages, cryosurgery or sometimes laser treatment may be possible. Otherwise conventional surgery may be necessary. Following retinal detachment in one eye, there is a considerable risk of it developing in the other. Your other eye will therefore also be examined and treatment carried out if necessary.

NO  Consult your physician if you are unable to make a diagnosis from this chart.

**EYE TESTING**

You should have your eyes tested routinely every 2 years. The ophthalmologist will test your sight in various ways. He or she will test the sharpness of your vision by asking you to read letters on a Snellen chart (named after its inventor). The result of the test is given as two figures. The first refers to the distance in feet - usually 20 feet - at which you are asked to read the letters. The second figure refers to the lowermost row of letters that you were able to read correctly, and indicates the optimum distance in feet at which a person with normal vision could read that row. So the result 20/40 means that the lowest row of letters that you were able to read at a distance of 20 feet is one that a person with normal vision would read at 40 feet.

The ophthalmologist also looks at each eye through an instrument called an ophthalmoscope to check that the back of the eye looks normal and make sure that there are no signs suggestive of a general disorder, such as high blood pressure or diabetes. Also, he or she will test the balance of the muscles that control the movements of the eyes to detect any eye muscle disorder.
29. EARACHE

Earache may vary from a dull, throbbing sensation to a sharp, stabbing pain that can be most distressing. It is a common symptom in childhood, but occurs much less frequently in adults. Pain in the ear is usually caused by infection and normally requires medical attention and antibiotic treatment.

Does the pain get worse when you pull on your ear lobe?
YES An infection of the outer-ear canal is a possibility. It may be localized (a coil or an abscess) or generalized (affecting the whole of the outerwear canal). Consult your physician.

Treatment: Your physician will examine your ear and may clean it out with a cotton swab or suction tube. He or she may also prescribe tablets and/or drops that, together with regular cleaning with a cotton swab, should clear the condition.

NO Do you have a blocked-up feeling in your ear that cannot be cleared by swallowing?
YES Did the pain begin after air travel?
YES Barotrauma, in which the air-pressure balance between the middle and outer ears is disrupted, is a possibility especially if you had a cold or a stuffy nose when you traveled.

Self-help: Try blowing through your nose while pinching the nostrils closed. In many cases, this brings relief. If the trouble persists for more than 24 hours, consult your physician.

NO Has your hearing become worse over the past few weeks or months?
YES Wax blockage may be causing the pain.

Self-help: To remove wax yourself, soften it with over-the-counter ear drops or warm oil for several days. Then lie in a warm bath with your ears submerged to loosen it. The wax should work its way out of the outer ear canal by itself. If you cannot remove the wax yourself, or if pain persists, consult your physician who may flush (syringe) the ear with warm water to warm away the blockage. Never attempt to lever the wax out yourself by poking a pointed instrument into your ear as this may tear a hole in the eardrum or canal skin.

NO An acute infection of the middle ear is a possibility. This may have occurred as a result of blockage of the Eustachian tube. Consult your physician.

Treatment: Your physician may prescribe decongestant nose drops or spray, to help unblock the eustachian tube and to allow restoration of normal ear
pressure. In addition, you may be given antibiotics to clear up a bacterial infection.

NO Is there a sticky greenish-yellow discharge from your ear?
YES An infection of the middle ear or of the outer-ear canal may be the cause of the pain. Consult your physician.  

Treatment: You, physician may prescribe antibiotics in the form of tablets, ear drops or, possibly, an injection. If the middle ear is affected you may also be given decongestants to clear the Eustachian tube.

NO Do you have a cold?
YES Colds that are accompanied by a severely stuffed-up nose often cause mild earache. However, severe earache is more likely to be the result of an acute infection of the middle ear.

Self-help: If the pain is mild, follow the advice on treating a cold. If the pain persists, or becomes severe, consult your physician, who may prescribe decongestant nose drops or spray and possibly, antibiotics.

NO Consult your physician if you are unable to make a diagnosis from this chart.

HOW TO RELIEVE AN EARACHE

In any case of earache, you will be able to relieve the pain by taking the recommended dose of aspirin or an aspirin substitute. It may also be comforting to place a warm heating pad against the ear. But remember that these measures alone will not cure the underlying disorder. With persistent cases of earache, you should always consult your physician.

EAR PIERCING

Many woman have holes pierced in their earlobes for earrings. If done property, this is a perfectly safe and painless procedure, but unfortunately, in many cases it is carried out inexpertly, leading to discomfort and sometimes infection. If you want to have your ears pierced, go to a reputable jeweler or department store. Ask what method of ear piercing they use. The usual technique is to use a special ear punch along with a local anesthetic. Other methods may not be reliable. Make sure that the conditions look clean and that all the instruments and earrings are sterilized before use. When you have had your ears pierced, you should wear only earrings of high carat gold for the first month and these should not be removed for the first two weeks. You will need to bathe the earlobe with hydrogen peroxide or isopropyl (rubbing) alcohol twice a day during this time. Do not have your ears pierced if you have any skin infection affecting the earlobes. If either earlobe becomes inflamed or if there is any pus after having your ears pierced. Consult your physician.
30. NOISES IN THE EAR

If you sometimes hear noises inside your ears, such as buzzing, ringing or hissing, you are probably suffering from a symptom known as tinnitus. This symptom can indicate a variety of ear disorders.

Did the noises start during or after air travel?
YES **Barotrauma**, in which the air-pressure balance between the middle and outer ears is disrupted, is a possibility especially if you had a cold or a stuffy nose when you traveled.

Self-help: Try blowing through your nose while pinching the nostrils closed. In many cases, this brings relief. If the trouble persists for more than 24 hours, consult your physician.

NO Have you noticed any loss of hearing?
YES Deafness often occurs together with noises in the ear. Go to chart 31.

Deafness

NO Are you taking, or have you recently taken, any prescribed or over-the-counter medications?
YES **Certain drugs** can cause noises in the ear as a side effect. Discuss the problem with your physician.

NO Do you have a tickling sensation in the ear?
YES  An insect, or other foreign body, may have become trapped in your outer-ear canal.
Self-help: Carry out the first-aid suggestions described above. If these are not effective, consult your physician. Never attempt to remove anything by inserting an object into the ear.

NO Consult your physician if you are unable to make a diagnosis from this chart especially if associated with hearing loss, dizziness, headache or ear pressure.

THE STRUCTURE OF THE EAR
The ear is made up of three main parts:

The outer ear includes the external part of the ear, the pinna, which collects and funnels sound waves along the outer-ear canal to the eardrum, which then vibrates.

The middle ear contains the eardrum and three small bones (hammer, anvil

and stirrup) that transmit the vibrations of the eardrum to the inner ear. Air pressure in the middle ear is kept normal by means of the eustachian tube that links the middle-ear cavity to the back of the throat.

The inner ear is filled with fluid and contains the cochlea, which converts the vibrations from the middle ear into nerve impulses. These are passed to the brain by the auditory nerve. The inner ear also contains the labyrinth (semicircular canals), which controls the body’s balance.

FIRST AID FOR AN INSECT IN THE EAR
If an insect has become trapped in your ear, you can safely try to remove it by tilting your head so that the affected side is uppermost and then pouring warm olive oil, mineral oil or baby oil into the ear (it is easiest if someone helps you do this). After 15 to 20 minutes, the insect should then float out. Alternatively you can simply lie back in a bath with your ears submerged. If these measures do not succeed in removing the insect, consult your physician.
31. DEAFNESS

Deafness—decreased ability to hear some or all sounds may come on gradually over a period of months or years, or may occur suddenly over a matter of days or

Do you have an earache?
YES Go to chart 29 Earache
NO Do you now have or have you had discharge from the ear?
YES Infection of the middle ear or of the outer-ear canal may be the cause of your deafness. Consult your physician.
   Treatment: If your infections acute, your physician will probably prescribe antibiotics, in the form of tablets, ear drops, or possibly an injection, to clear up the infection. If the middle ear is affected, you may also be given decongestant nasal spray or drops to help unblock the Eustachian tube.
NO Does your ear feel blocked inside?
YES Have you had a runny or stuffy nose, or a sore throat in the past week?
   YES Blockage of the eustachian tube, as a result of a cold or hay fever, may account for your deafness. This is usually no cause for concern and needs no specific treatment. But if your hearing does not improve within 3 days, consult your physician.
   NO Do you have occasional attacks of dizziness, when everything around you seems to spin?
   YES Meniere’s disease may be the problem This is a relatively uncommon disorder that occurs when there is an increase in the amount of fluid in the labyrinth (See how you keep your balance). The problem is most common in the middle age. Consult your physician.
   Treatment: Your physician will probably arrange for you to undergo tests to confirm the diagnosis. Sometimes operation is recommended.
NO Do you regularly spend time listening to loud music, for example, at rock concerts or discos, or through head-phones; or are you often exposed to loud noise at work; or are you exposed to loud noise through hobbies involving power tools or firearms?
YES Repeated exposure to loud noise has probably caused your hearing loss. Even noise levels that do not cause discomfort can result in permanent damage to your hearing. Headphones can be particularly dangerous, since it is easy to have the volume too high (to overcome external noises such as traffic) without realizing it.
   Self-help: Take appropriate steps to avoid noise exposure. Keep well away from the speakers at rock concerts and discos, and reduce the volume on your headphones so that others in the same room cannot hear
If you work in noisy surroundings (in a factory, for example), your employer should supply you with ear protectors, or you can buy your own ear plugs. You should consult your physician, who may arrange for you to have special hearing tests and, if necessary, recommend a hearing aid.

NO Have you recently taken any prescribed or over-the-counter medications?

YES Certain drugs can cause deafness as a side effect. Discuss the problem with your physician.

NO Has your hearing been getting worse over a period of several weeks or more?

YES Have other members of your family suffered from gradual hearing loss?

YES Are you over 50 years old?

YES Presbycusis, gradual loss of hearing as you get older, is common, especially if other members of your family have become deaf in old age. Consult your physician.

Treatment: Your physician may refer you for hearing tests. If these confirm the diagnosis, you will probably be offered a hearing aid.

NO Otosclerosis, a disorder that affects the working of the bones in the middle ear, may be the problem. This type of deafness usually affects young adults and is especially common in women. The disorder may get worse during pregnancy (see Deafness and pregnancy). Consult your physician.

Treatment: If your physician suspects otosclerosis, he or she will probably arrange for you to undergo hearing tests. If you have serious loss of hearing in one or both ears, a stapedectomy may be recommended.

NO Wax blockage may be the cause of your deafness.
Self-help: To remove wax yourself, soften it with over-the-counter ear drops or warm oil for several days. Then lie in a warm bath with your ears submerged to loosen it. The wax should work its way out of the outer ear canal by itself. If you cannot remove the wax yourself, or if pain persists, consult your physician who may flush (syringe) the ear with warm water to warm away the blockage.

NO Consult your physician if you are unable to make a diagnosis from this chart.

Audiometry
The first part of this test measures your ability to hear sounds conducted through the air. You are asked to listen through headphones, one ear at a time, to different pitches of sound. Each sound is played first at an inaudible level, then the volume is gradually increased until you signal that you can hear it.
The second part of the test measures your ability to hear the same sounds conducted through the bones in your head. For this test you wear a special headset that vibrates against your skull, usually behind the ear.
The third part of the test measures your ability to understand and repeat certain words. The results of the tests are recorded on an audiogram and show what sounds you have difficulty hearing.

Acoustic impedance testing
Acoustic impedance testing is used to assess the movement of the eardrum, which may be impaired as a result of a disorder of the middle ear. A special probe containing a sound transmitter and receiver is inserted into the outer-ear canal. Air is pumped through the probe and the ability of the eardrum to reflect sound emitted by the sound transmitter at different air pressure levels is measured. From the results it is possible to determine the ease with which sound is transmitted through the eardrum and into the inner ear.

DEAFNESS AND PREGNANCY
If you notice any loss of hearing during pregnancy, you should always seek your physician's advice. This is because otosclerosis, a middle ear disorder resulting in progressive deafness, can sometimes appear for the first time or get worse during pregnancy. The disorder tends to run in families.

STAPEDECTOMY
Stapedectomy is an operation on the stirrup bone in the middle ear that is often carried out in severe cases of otosclerosis. Usually the operation produces a marked improvement in hearing but, unfortunately, in a small proportion of cases it results in complete deafness in that ear.

The operation
During the operation, the eardrum is moved aside and the stirrup, one of the three tiny bones in the middle ear that is immobilized by the disease, is replaced by a metal or plastic substitute. This improves the conduction of sound through the middle ear.
Stapedectomy usually involves a hospital stay of 2 to 3 days and convalescence at home for another week or so. You may feel dizzy for a few days following the operation.
32. RUNNY NOSE

Blockage of the nose by a thick or watery discharge is probably one of the most familiar symptoms. It is nearly always caused by irritation of the mucous membrane lining of the nose. This is usually the result of infection, but may sometimes occur as an allergic reaction. A runny nose rarely indicates serious disorder.

Do you have a clear and watery discharge?
YES Is your temperature 100F (38C) or above?
YES A generalized virus infection (such as flu) is a good possibility.  
Self-help: Stay in bed and take aspirin or an aspirin substitute to relieve any discomfort and reduce fever. If you do not feel any better in 48 hours or if you start to feel breathless, call your physician.
NO Are your eyes itchy AND/OR have you been sneezing?
YES Do you have sore throat or have you had sore throat within the past 4 days?
YES A common cold is probably making your nose run.
Self-help: See Treating a cold.
NO Allergic rhinitis (or hay fever) may be the cause of your runny nose. People with this condition have an allergic reaction to a particular substance, often pollen or house dust.
Self-help: If you know what causes the allergic reaction, you can try to avoid contact with that substance. If you are not sure of the cause, consult your physician, who may arrange special tests to identify the substance. Antihistamine tablets, available without a prescription, will give relief from the symptoms. But most of these tablets will make you drowsy, so do not take them if you intend to drive or operate machinery. If your symptoms persist, consult your physician, who may prescribe further drug treatment.
NO Local irritation has probably caused your runny nose. This may be due to smoke, fumes or even eating spicy food.
Self-help: If you have been exposed to an irritant, the discharge should clear up as soon as the cause is removed, and no treatment is needed. If you are troubled by a persistent nasal discharge, consult your physician.
NO Do you have a thick and opaque discharge?
YES Does your face feel painful or tender just above or below the eyes?
YES Sinusitis (inflammation of the membranes lining the air spaces in the skull) may be the cause.
Self-help: Stay inside in a warm and humid atmosphere, and take aspirin or an aspirin substitute to relieve the discomfort. If you are no better in 48 hours, consult your physician who may prescribe antibiotics and decongestants. If you suffer from recurrent sinusitis, an operation to clear the sinuses may be recommended.
A common cold, virus infection of the nasal passages probably making your nose run.

Self-help: See Treating a cold.

Consult your physician if you are unable to make a diagnosis from this chart.

NOSEBLEEDS

Bleeding from the nose is nearly always the result of damage to the lining of the nasal passages, from injury or inflammation. Nosebleeds can happen when you have a cold and are particularly common in pregnancy when the increase in blood supply makes the tiny blood vessels in the nose more likely to rupture. Nosebleeds are never a sign of high blood pressure in pregnancy.

Treatment
If you have a nosebleed, the best way of stopping it is to sit leaning slightly forward and to pinch the end of your nose firmly between the thumb and forefinger for about 5 minutes while keeping your mouth open. An ice pack or cold sponge applied to the nose may also be helpful. If the bleeding continues for more than 20 minutes, consult your physician or go to the emergency room of your local hospital.

TREATING A COLD
If you have a cold, stay at home in a warm, but not overheated room. Moisten the atmosphere with steam from a kettle of hot water or a room humidifier. Drink plenty of fluids, preferably fruit juice, and take aspirin or an aspirin substitute to relieve any symptoms of fever. If you are prone to ear infections or bronchitis. If your nose is still running after 10 days or if the infection seems to have spread beyond the nose and throat, consult your physician.
33. SORE THROAT

Most people suffer from a painful, rough or raw feeling in the throat at times. This is usually the result of a minor infection or local irritation, and almost always disappears within a day or so without treatment.

Is your temperature 100°F (38°C) or above?
YES  Do you have two or more of the following symptoms?
   1. headache
   2. cough
   3. generalized aches and pains
   YES  A generalized virus infection, such as flu, is a strong possibility.
   Self-help: Stay in bed and take aspirin or an aspirin substitute to relieve any discomfort and reduce fever. If you do not feel any better in 48 hours, or if you develop further symptoms (such as a rash), call your physician.

NO  Do you have swelling or tenderness in your neck?
   YES  Is the swollen or tender area between the angle of the jaw and the ear?
   YES  Mumps, a virus infection that mainly affects the salivary glands, is a possibility, particularly if you have not had it before. Consult your physician.
   Treatment: You will probably be advised to stay in bed and take aspirin or an aspirin substitute to relieve the discomfort and reduce any fever. If you have pain in the abdomen it could be a sign that your pancreas or your ovaries have become inflamed. In this case, your physician may prescribe anti inflammatory drugs.

NO  Pharyngitis or tonsillitis, viral or bacterial infection of the throat or tonsils, respectively, is possible.
   Self-help: Take aspirin or an aspirin substitute to relieve your symptoms, and avoid smoking and drinking alcohol. Consult your physician if symptoms persist for more than 48 hours. He or she may prescribe antibiotics. Sometimes, in patients with recurrent tonsillitis and certain other conditions, an operation to remove the tonsils may be recommended.

NO  Have you got a stuffy or runny nose AND/OR have you been sneezing?
   YES  A common cold, virus infection of the nasal passages, is probably responsible for your sore throat.
   Self-help: See Treating a cold.

NO  Have you been smoking or drinking heavily OR have you been in a smoky atmosphere just before the sore throat started (for example, at a party or work)?
   YES  Inflammation of the throat, due to smoke or alcohol, has probably caused the soreness.
   Self-help: Do not smoke or drink alcohol. Give your throat a rest by restricting your diet to fluids as much as possible. Aspirin
or an aspirin substitute may also help to relieve the discomfort. Consult your physician if your throat is no better within 48 hours.

NO Are you hoarse or have you lost your voice?
YES Go to chart 34 Hoarseness or loss of voice
NO Consult your physician if you are unable to make a diagnosis from this chart and your sore throat persists for more than 48 hours.

HOW TO RELIEVE A SORE THROAT
If you have a sore throat, you can reduce the inflammation by taking frequent cold drinks. Aspirin or an aspirin substitute, taken by mouth or as a gargle, may also be helpful. Do not smoke or drink alcohol, and, if your throat is very sore, avoid solid food. There are many over-the-counter throat lozenges and gargles available, but a salt water gargle is probably the best. While there is no medical evidence that these reduce inflammation, you may find them soothing and they are unlikely to do you any harm.
34. HOARSENESS OR LOSS OF VOICE

Hoarseness, huskiness or loss of voice is almost always caused by laryngitis - inflammation and swelling of the vocal cords that interferes with their ability to vibrate normally to produce sounds. There can be a variety of underlying causes for this inflammation, including infections or irritations, most of which are minor and easily treated at home. However, persistent or recurrent hoarseness or loss of voice may have a more serious cause and should always be brought to your physician's attention without delay.

Has the hoarseness come on within the past few days?

**YES** Do you have, or you recently had, a cold, cough or sore throat?

**YES** An infection affecting the throat has probably inflamed your vocal cords, leading to laryngitis.

**Self-help:** See Treating laryngitis.

**NO** Have you been using your voice more than usual?

**YES** Overuse of the vocal cords can inflame them, leading to laryngitis.

**Self-help:** See Treating laryngitis.

**NO** Laryngitis (inflammation of the vocal cords) is the most likely cause of sudden hoarseness or loss of voice.

**Self-help:** See Treating laryngitis.

**NO** Do you regularly use your voice a lot in your work - for example, are you a teacher or a singer?

**YES** Repeated overuse of your vocal cords over a long period can lead to them becoming persistently inflamed (chronic laryngitis). Consult your physician.

**Treatment:** Your physician will examine your throat to eliminate the possibility of a more serious underlying problem. In addition to the treatment recommended for laryngitis, you may be advised to give your voice a prolonged rest.

**NO** Have you been drinking or smoking heavily?

**YES** Smoking and heavy drinking can both lead to persistent inflammation of the vocal cords (chronic laryngitis). Consult your physician.

**Treatment:** If your physician confirms the diagnosis, he or she will probably recommend that you stop smoking and/or give up alcohol, at least until your voice has recovered. If, however, you return to your former drinking and/or smoking habits, the problem is likely to recur and in time may lead to permanent damage to your vocal cords. See also The dangers of smoking, and The effects of alcohol.

**NO** Are you over 40 years old?

**YES** Have you noticed two or more of the following symptoms?

1. feeling the cold more than you used to
2. dry skin or hair
3. weight increase without overeating

**NO**
4. unexplained tiredness
YES Hypothyroidism (underactive thyroid gland), an uncommon problem that is most likely to occur in middle-aged women, is a possibility. Consult your physician.

Treatment: If hypothyroidism is diagnosed, your physician will prescribe tablets of synthetic thyroid hormones. These tablets will make you feel much better in a few days, and after a few months you should have returned to normal health. However, it will be necessary to continue taking the tablets.

NO CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Gradedly increasing huskiness may simply be a side effect of hormonal changes as you get older, however, hoarseness that lasts longer than a week may, in rare cases, be a sign of a tumor in the voice box, particularly if you smoke.

Treatment: Your physician will probably examine your throat may arrange for you to have a biopsy of the voice box. Many growths can be removed.

NO Consult your physician if you are unable to make a diagnosis from this chart and your hoarseness or loss of voice persists for more than a week or recurs.

WARNING
PERSISTENT HOARSENESS
Hoarseness or loss of voice that is recurrent or lasts more than a week may be a sign of a tumor in the voice box, especially if you are over 40 and smoke. Consult your physician without delay!

TREATING LARYNGITIS
If you have laryngitis, the following self-help measures should help your voice to return to normal within a week:
1. Do not smoke or drink alcohol.
2. Rest your voice as much as possible.
3. Drink plenty of fluids and take aspirin or an aspirin substitute to relieve any cold-like symptoms.
35. WHEEZING

Wheezing sometimes occurs when breathing out if you have a chest cold, and this is no cause for concern as long as breathing is otherwise normal. Such wheezing can usually be heard only through a stethoscope, but it may become more apparent to you when you exhale violently (during exercise, for example). Loud wheezing, especially if you also feel breathless or if breathing is painful, may be a sign of a number of more serious conditions, including congestive heart failure, asthma and bronchitis, which require medical attention.

Has the wheezing started within the past few hours?
YES Have you coughed up frothy pink or white phlegm?
YES CALL YOUR PHYSICIAN NOW!
A dangerous buildup of fluid in the lungs, perhaps as a result of heart disease, is a possibility. Sit upright in a chair and try to keep calm; this will make breathing easier for you until help arrives.
Treatment: Keep a sample of the phlegm if possible in a glass or paper cup; this will help your physician to make a quick diagnosis of the problem. You will probably be admitted to the hospital where you will be given oxygen and drugs to assist breathing. These may include a diuretic, to drain fluid from the lungs, or a bronchodilator, to open up blocked airways in the lungs. When the lungs have cleared, treatment will depend on the underlying problem.

NO Is breathing so difficult that you feel you are suffocating?
YES EMERGENCY GET MEDICAL HELP NOW!
A severe attack of asthma is a possibility.
Treatment: While waiting for help to arrive, carry out the first-aid measures described below. A severe attack usually requires hospital admission. Drugs will be given and, if necessary, the physician may use a mechanical respirator to assist breathing.

NO A mild attack of asthma is probably making you wheeze.
Self-help: Since asthma is most often due to an allergy, try to find which substances you are allergic to, and avoid contact with them as much as possible. Consult your physician, who will be able to prescribe drugs to prevent further attacks, and to help you when attacks occur. In addition, he or she may arrange for you to undergo special allergy tests to help identify the cause of your asthma.

NO Is your temperature 100°F(38°C) or above?
YES Acute bronchitis (infection of the airways in the lungs) is a possibility.
Self-help: Take aspirin or an aspirin substitute, drink fluids and stay in a warm, humidified environment. Call your physician if you have difficulty breathing, or if you are no better in 48 hours.

NO Do you wheeze a little most days?
YES Do you cough up gray or greenish-yellow phlegm most days?
YES  Chronic bronchitis (persistent inflammation of the airways in the lungs) may be the cause of the wheezing, especially if you smoke and have had similar periods of wheezing in the past. Consult your physician.

Treatment: Your physician will advise you to give up smoking, if you are a smoker, as this is likely to make the problem worse. After tests have been done, such as a chest X-ray, he or she may prescribe antibiotics in the form of tablets or capsules. An aerosol inhaler may help you if you suffer from breathlessness.

NO  Consult your physician if you are unable to make a diagnosis from this chart.
36. COUGHING

A cough may produce phlegm or be "dry." It is the body's response to any foreign body, congestion or irritation in the lungs or the throat (for instance, as a result of a cold, smoking or an allergy). Sometimes, however, coughing signals a more serious disorder in the respiratory tract and requires medical attention.

Is the cough dry, producing no phlegm?
YES Are you hoarse or have you lost your voice?
   YES Go to chart 34. Hoarseness or loss of voice
   NO Is it possible that you have inhaled a small particle of food, such as a peanut?
      YES A foreign body in the lungs has probably caused your cough. This is the body’s natural response to try to expel the particle and is no cause for concern. But, if coughing fails to clear the lungs, or is continuous for more than an hour, consult your physician.
      NO Could you have inhaled the fumes of an irritant at your place of work or home?
         YES Irritation of the lungs by the fumes is a possible cause of your cough. It should stop as the fumes disperse. If it does not clear within half an hour or if you become short of breath, call your physician.
         NO Have you had a dry cough with no other symptoms for more than a month?
            YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
               Inflammation of the windpipe, possibly as a result of an allergy or smoking, is probably causing the cough. But there is a possibility that it may be a symptom of a tumor, especially if you are over 40 and a smoker.
               Treatment: Your physician will consider your age and whether or not you smoke and probably arrange for you to undergo such tests as a chest X ray and bronchoscopy. This way he or she will be able to diagnose whether the cough is bronchitis from smoking, the result of an allergy, or something more serious.
            NO

BRONCHOSCOPY
Bronchoscopy is a technique for examining the windpipe and lungs using a device known as a bronchoscope. This consists of a special tube equipped with lighting. The narrow tube is passed down the windpipe and into the lungs, allowing the physician to see any abnormalities.

THE DANGERS OF SMOKING
Following facts about the effects of smoking on your body. Tobacco smoke contains at least three dangerous substances: tar, nicotine and carbon monoxide. Tar in tobacco smoke collects as a sticky deposit that clogs and irritates the lungs and other parts of the respiratory tract. This can lead to diseases such as chronic bronchitis and emphysema and, in some cases can cause lung cancer, a life threatening disease that is almost unknown in nonsmokers. The toxic chemicals in tar are also absorbed into the bloodstream and then excreted in the urine. The presence of such substances in the bladder is known to contribute to the development of bladder cancer.

Nicotine is a highly addictive drug that acts on the nervous system, increasing the heart rate and the risk of developing abnormal heart rhythms.

Carbon monoxide, absorbed into the bloodstream from tobacco smoke, reduces the ability of the red blood cells to carry oxygen to the body cells and therefore exaggerates the effects of any circulatory disorder. In addition, carbon monoxide may encourage the formation of substances that help block the arteries and cause fatal heart attacks and disabling circulation problems in the legs. This last effect means that women who smoke are more at risk from possible dangerous side effects of the contraceptive pill and many physicians are reluctant to prescribe the pill to heavy smokers.

Reducing the risks
Some cigarettes contain less tar and nicotine than others. But switching to a low-tar brand is not an effective way of reducing the risks. Most heavy smokers smoke more and inhale more deeply. The best way to avoid smoking-related disease is to give up smoking. If you succeed, the chances of developing these problems diminish with every cigarette-free year.
NO Has the cough started within the past week?
YES Is your temperature 100°F (38°C) or above?
YES Are you short of breath?
YES CALL YOUR PHYSICIAN NOW! Pneumonia is a possibility. This is an infection of the lungs that can be dangerous, especially for the elderly and those in poor health.
Treatment: Your physician will probably recommend that you take aspirin or an aspirin substitute to reduce your fever and relieve any discomfort. He or she may prescribe antibiotics and, in a severe case, may advise admission to a hospital.
NO Acute bronchitis (infection of the airways in the lungs) is a possibility.
Self-help: Take aspirin or an aspirin substitute and cough medicine following the instructions on the labels. Stay in a humid environment but it’s not necessary to go to bed. Call your physician if you have difficulty in breathing, or if you are no better in 48 hours.
NO Do you have a runny nose AND/OR a sore throat?
YES A common cold, a viral infection of the nasal passages has probably caused these symptoms.
Self-help: For advice on the treatment ofcold.
NO Are you short of breath, even when you have not been exercising?
YES Go to chart 37. Difficulty breathing
NO Do you cough up thick, gray or greenish-yellow phlegm most days?
YES Chronic bronchitis, persistent inflammation of the airways to the lungs, may be the cause of a cough, especially if you smoke and have had similar periods of persistent coughing in the past. Consult your physician.
Treatment: Your physician may prescribe antibiotics in the form of tablets or capsules. An aerosol inhaler may help you, if you are suffering from shortness of breath. However, the problem is likely to get worse over the years unless you stop smoking.
NO Have you had your cough for several weeks or months AND has it been getting more severe?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
A serious lung disorder, such as tuberculosis or lung cancer may cause persistent coughing although, a simpler explanation, such as an allergy or chronic bronchitis, is more likely.
Treatment: Your physician will probably arrange for tests to find out which underlying disorder is causing the symptoms. You may be asked to give blood and phlegm samples for analysis. A chest x-ray and bronchoscopy may also be necessary.
Consult your physician if you are unable to make a diagnosis from this chart.

CHEST X RAY

A chest X-ray is an effective way of examining the lungs and is used by chest specialists as their main diagnostic test. It will show up infections, tumors, other lung disorders, fluid or air in the chest cavity and damage to the rib cage.

This chest x-ray shows a condition called pericardial effusion, in which fluid collects around the heart.

COUGHING UP BLOOD

Phlegm that is colored or streaked bright red or rusty brown may contain blood. Although coughing up blood may simply mean that you have ruptured a small blood vessel in the lung, it may also indicate congestion of the lungs, an infection such as pneumonia or tuberculosis, or a tumor. If you feel quite well and cough up blood on a single occasion, you need not feel alarmed; but coughing up blood more than once, or if you have any of the additional symptoms described, may indicate one of the following serious problems and you should seek medical advice without delay.

A chest infection, such as pneumonia - if your temperature is above 102F (39C).

A blood clot in the lung - which is most likely if you have recently had an operation or been confined to bed by an injury or illness. This is an EMERGENCY.

Lung cancer or tuberculosis especially if you have had a cough for many weeks or months.
37. DIFFICULTY BREATHING

If you have the feeling that you cannot get enough air or are breathless to the extent that you are breathing rapidly or "puffing," either at rest or after gentle exercise, this suggests the possibility of a problem affecting the heart or the respiratory system. The sudden onset of difficult breathing while eating is more likely to be caused by choking, and you should immediately carry out first aid as described in the box opposite. Because of the possibility of a disorder that may threaten the supply of oxygen to the body, it is important to seek medical advice promptly if you notice any of the symptoms mentioned in this diagnostic chart.

Do you have pain in the chest AND/OR is breathing painful?
YES Go to chart 55. Chest pain
NO Are you wheezing?
YES Go to chart 35 Wheezing
NO Has the breathlessness come on suddenly?
YES Is your temperature 100F (38°C) or above AND/OR do you have a cough?
YES CALL YOUR PHYSICIAN NOW!
A chest infection, such as pneumonia or acute bronchitis, is the likely cause of your symptoms. This can be dangerous, especially for the elderly and those in poor health.
Treatment: Your physician will probably prescribe antibiotics and, in a severe case, may advise hospital admission. If treated promptly, an otherwise healthy adult will usually recover quickly.

NO Have you been awakened at night by an attack of breathlessness AND/OR have you been coughing up frothy white or pink phlegm?
YES CALL YOUR PHYSICIAN NOW!
A dangerous buildup of fluid in the lungs, perhaps as a result of heart disease, is a possibility. Sit upright in a chair and try to keep calm, this will make breathing easier for you until help arrives.
Treatment: Keep a sample of sputum if possible, as this will help your physician make a quick diagnosis of the problem. You will probably be admitted to the hospital, where you may be given oxygen and drugs to assist breathing. These may include a diuretic to drain fluid from the lungs or a bronchodilator to open up blocked airways in the lungs. When the lungs have cleared, treatment will depend on the underlying problem.

NO Have you recently been confined to bed through illness or injury?
YES **EMERGENCY GET MEDICAL HELP NOW!**

**Pulmonary embolism** (a blood clot in the lung) is a possibility especially if you have also coughed up bloody sputum.

**Treatment:** You will probably be admitted to the hospitals where you may need to undergo diagnostic tests such as a chest X ray, a radioisotope scan of the lungs and electrocardiography. If a diagnosis of pulmonary embolism is confirmed, you will probably be given drugs to disperse the blockage and to prevent further blood clots from forming.

NO Has the attack of breathlessness come on at a time when you are feeling tense or under great stress?

YES **Severe anxiety** may sometimes bring on attacks of hyperventilation (see **Panic attacks**). If this is the first time you have experienced such symptoms, or if you are in any doubt as to their cause, call your physician at once.

NO **Consult your physician without delay if you** are unable to make a diagnosis from this chart.

NO Do you cough up thick, or greenish-yellow phlegm most days?

YES **Chronic bronchitis** (persistent inflammation of the airways in the lungs) may be the cause of your breathing difficulty, especially if you smoke and have had periods of wheezing in the past. If your work involves regular exposure to mineral dusts, an industrial lung disease such as pneumoconiosis is also possible. Consult your physician.

**Treatment:** Your physician will advise you to give up smoking, if you are a smoker, as this is likely to make the problem worse. Following tests such as a chest X ray, he or she may preset be antibiotics in the form of tablets or capsules. An aerosol inhaler may help to relieve breathlessness.

NO Does your work involve regular contact with grain or other crops AND/OR caged birds or animals?

YES **Histoplasmosis** (a fungal infection of the lungs), farmer's lung (an allergic reaction to inhaled particles in moldy grain or hay), or bird-breeder's lung (a reaction to inhaled dust containing bird proteins) can cause breathless attacks often accompanied by coughing. Consult your physician.

**Treatment:** Your physician will probably arrange for you to have diagnostic tests including a chest X-ray and skin tests for allergic sensitivity. If you are found to have histoplasmosis, you will be given treatment with antifungal drugs. If your breathlessness is due to allergy, you
will probably be advised to avoid further exposure to the substance causing the reaction by changing your job or by wearing a protective mask at work. You may also be given drugs to reduce inflammation of the lung.

Are you pregnant?

NO

YES Go to chart 79. Shortness of breath in pregnancy

NO Consult your physician without further delay if you are unable to make a diagnosis from this chart.

WARNING
SEVERE DIFFICULTY BREATHING

If someone is having severe difficulty breathing AND/OR if there is a bluish coloring around the lips, this is an EMERGENCY requiring immediate medical attention. While waiting for medical help to arrive, loosen any tight clothing and help the victim to sit in an upright position. If necessary, carry out first aid.

FIRST AID FOR STOPPED BREATHING

If someone stops breathing carryout first aid as described below before summoning emergency medical help

Suspected choking

When severe breathing difficulty comes on while eating, and if the victim is unable to cough up the obstruction, carry out the following steps:

Hold the victim up from behind in a standing position, pressing one fist (with thumb inward) against the waist. Hold your other hand over the fist and thrust hard in and up under the rib cage. If this does not clear the blockage, repeat 3 more times.

If this does not clear the obstruction, lay the victim on his or her back. Tilt the head back (chin up), open the mouth and sweep deeply into the mouth with hooked finger (you may need to remove dentures).

If obstruct on is still not dislodged. 3repeat steps 1 and 2,

It breathing does not restart following 4removal of the blockage, carry out mouth-to-mouth resuscitation.
38. TOOTHACHE

Teeth are just as much living structures as any other part of the body, despite their tough appearance. They are constantly under threat from our diet because of the high level of sugar we consume. Bacteria act on sugar to produce acids that attack enamel, the tooth's protective layer. When this happens, bacterial destruction (decay) spreads down the root canal to the nerve, causing inflammation and pain. Any pain in one tooth or from teeth and gums in general, whether it is a dull throb or a sharp twinge, should be brought to your dentist's attention.

Do you have one or more of the following symptoms? 
1. continuous pain 
2. a tooth that feels long or high 
3. a tooth that feels loose 
4. a fever 

YES  CONSULT YOUR DENTIST WITHOUT DELAY!

A tooth abscess is possible  This is formed when pus builds up in the bone and tissue near a tooth treat has had a very deep filling or cavity, or one that has been injured. 

Treatment:  Two forms of treatment are common - root canal treatment or extraction. If the dentist feels the tooth can be saved, a root canal may be performed the dentist will make an opening in the tooth to release the pus and relieve the pressure. Sometimes an emergency incision is made in the gum to relieve the swollen area. The diseased tissue is then removed from inside the tooth. Later a permanent filling is placed in the root canal and the tooth is sealed and crowned. About six months later an X-ray will be needed to ensure that the bone and tissue have grown back to normal around the root of the tooth. Extraction of an abscessed tooth may be suggested as an alternative to a root canal. A bridge or partial denture will be needed to keep other teeth from shifting.

NO  Do you have repeated bouts of throbbing pain OR is the tooth extremely sensitive to both hot and cold stimuli AND does the pain continue for several minutes after the stimulus is removed? 

YES  Advanced dental decay, a very deep filling or an injury may, have irreversibly inflamed the pulp (nerve) in the center of the tooth. 

Treatment:  The dentist will remove the decay and/or old filling. If the nerve is exposed, a root canal or extraction maybe needed. If the pulp is not visibly exposed, the dentist may try to soothe the inflamed pulp with a temporary, medicated filling. After a few weeks, the tooth will be reevaluated for possible root canal treatment, extraction, or permanent filling

NO  Has the dentist filled one or more of your teeth within the past few weeks? 

YES  Does the tooth hurt only when you bite on it? 

YES  An uneven or "high" filling can cause discomfort. Your dentist will adjust the filling if necessary.
NO  After a filling, especially a deep one, it is normal to have some sensitivity especially to cold water or air. This sensitivity will be sharp but will last for only a few seconds and then subside. If the sensitivity increases in intensity or duration, or if the tooth becomes sensitive to heat consult your dentist for the possibility of irreversible pulp (nerve) damage.

NO  Does the pain only occur when you are eating something cold or sweet (ice cream or chocolate) AND does the pain go away after a few seconds?

YES  Decay under an old filling, a cracked tooth or filling, or exposure of the root surface due to improper tooth brushing or gum disease may be the cause of the pain. Consult your dentist.

Treatment: Your dentist may recommend replacing filling or remove any decay. If the problem is sensitivity, the dentist may recommend a special desensitizing toothpaste, protective fluoride applications or bonding to seal the sensitive root area.

NO  Does the tooth hurt only when you bit or chew on it?

YES  A cracked filling or a cracked or fractured tooth is probably the cause of the pain. Consult your dentist.

Treatment: You may need to have the affected tooth crowned (capped) or have a root canal if the pain becomes more severe. The tooth may need to be extracted if the crack is too deep into the tooth. Pain may also be caused by acute sinus problems that make the upper back teeth ache and tender to bite on. If this is the case, you may, need to see a physician for further treatment.

NO  Dental decay may have caused a hole (or cavity) to form in your tooth. Consult your dentist.

Treatment: Your dentist will probably clean out the affected tooth and put in a filling.

CARE OF YOUR TEETH

Brushing
Several tooth brushing techniques are acceptable as long as you manage to remove all traces of food and plaque from the back, front, and biting surfaces of your teeth. If you use a toothbrush with a small head you will be able to get at the difficult areas more easily. The toothbrush should have soft, rounded bristles unless your dentist suggests another type of brush.

Dental floss
Daily use of dental floss helps to remove debris and plaque from between your teeth and under your gums: Your dentist or hygienist will teach you how to floss your teeth correctly.

Diet
Sugary foods are the main cause of tooth decay. So try to keep your consumption of sweet foods to a minimum. If you need to eat snacks during the day, they should consist of cheese or nuts. If you find it hard to do without sweet foods, confine them to mealtimes and finish the meal with cheese, as this tends to neutralize acid formation.
39. DIFFICULTY SWALLOWING

Difficulty swallowing is most often the result of an infection causing soreness, swelling and excess mucus at the back of the throat. Difficulty or pain when swallowing that is not related to a sore throat may be a sign of a more serious disorder affecting the esophagus and should be brought to your physician's attention.

Do you have a sore throat?
YES Could you have swallowed something such as a fishbone?
YES Something lodged in your throat may be the cause of the soreness. Consult your physician.
Treatment: Your physician will examine your throat and may be able to remove the object at the same time. If he or she cannot pinpoint the source of the trouble, you may need to have other tests. Surgery is only used to remove a large, firmly stuck, pointed, foreign body.
NO Go to chart 33 Sore throat

NO Does food seem to stick high up your chest?
YES Do you sometimes get a pain in your chest, particularly when you bend over or lie down?
YES A hiatal hernia may make it seem difficult to swallow, as well as allowing the reflux of acid juices into the esophagus (gullet), causing heartburn. The disorder occurs when part of your stomach protrudes into the chest through the opening in the diaphragm and is most likely if you are overweight or pregnant (see chart 77, Heartburn in pregnancy). Consult your physician.
Treatment: If you are overweight, your physician will probably recommend that you lose weight, as this will almost certainly help the problem (see How to lose weight). Meanwhile, he or she may advise you to take small, frequent meals and to avoid tobacco, coffee or alcohol, as these aggravate stomach and digestive disorders. If you are troubled by heartburn, your physician may also prescribe an antacid. Alternatively, you might try eating a little bread or drinking a glass of milk to relieve the pain. Try eating several small meals during the day instead of two or three large ones. Avoid bending over or lying down after a meal and do not wear tight belts or girdles. Raising the head of your bed by about 4 in. should prevent acid reflux at night.
NO Is the difficulty in swallowing gradually getting worse AND/OR have you lost more than 10 lb. (4.5 kg) in weight in the past 10 weeks?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
A tumor, though only a slight possibility, may be the cause of these symptoms, particularly if you are over 40.
Treatment: Your physician will arrange for you to have diagnostic tests, such as a barium X ray an endoscopic examination of the esophagus (see Endoscopy) and a biopsy of the esophageal lining.

NO  Do you swallow normally, but then feel that your throat is obstructed?
YES  Anxiety can sometimes cause this type of difficulty in swallowing. Go to chart 20 Anxiety
NO  Consult your physician if you are unable to make a diagnosis from this chart.

ENDOSCOPY
Endoscopy is a procedure by which a flexible fiberoptic tube equipped with a lighting and lens system is used to examine a body cavity. Different types of endoscope are used to examine different parts of the body (see, for example, Bronchoscopy). The illustration at right shows an endoscope passed down the throat into the esophagus and stomach. A physician will be able to spot any obstruction or abnormality through an eyepiece.
40. SORE MOUTH OR TONGUE

Most painful areas on the lips or tongue or around the teeth are symptoms of minor conditions. You will be able to tell the mild from the serious by the length of time they take to heal. Any condition lasting longer than 3 weeks should be seen by your physician or dentist. It is important to keep the delicate mucous membrane that lines the mouth healthy by maintaining good oral hygiene at all times (see Care of your teeth).

Is only your tongue sore?
YES   Is the soreness in one place only?
YES   A jagged tooth or badly fitting dentures can cause enough friction to make your tongue sore. Consult your dentist.
NO   Is your tongue painful all over?
YES   Glossitis is a possibility. In this condition, the protective tissues on the surface of the tongue may be inflamed, leaving the tongue exposed and sore. Consult your physician.
Treatment: Your physician will try to find the cause of the glossitis. If it is due, for example, to a vitamin deficiency or to anemia, treatment of the underlying disorder should also clear up the glossitis.
NO   Are there any discolored areas inside your mouth or on your tongue?
YES   Are the discolored areas creamy yellow AND can they be scraped off easily?
YES   Oral thrush is a possibility. This produces sore patches in the mouth when the creamy-yellow areas are rubbed during eating or cleaning teeth. Consult your physician.
Treatment: Your physician will examine you and may take a smear of the patch for laboratory analysis, and he or she may arrange for you to have blood tests to rule out the possibility of any serious underlying disease. The usual treatment for oral thrush consists of a course of antifungal lozenges or mouthwash.
NO   Are the discolored areas painful, pale-yellow spots?
YES   Do you feel sick AND/OR is your temperature 100F (38C) or above?
YES   A viral infection is a likely cause of these symptoms. Consult your physician.
Treatment: Your physician may take a scraping from the inside of your mouth and a blood sample for analysis. He or she may advise you to take aspirin or an aspirin substitute to relieve your symptoms.
NO   Mouth ulcers that look like white craters are probably causing the soreness. These are breaks in the lining of the mouth that uncover the sensitive tissue underneath.
Self-help: most ulcers heal in a few days and do not require treatment. However, over-the-counter lozenges may relieve the pain and help the ulcers to heal. An antiseptic mouthwash or a mouth rinse consisting of warm water and salt will also help. Avoid eating hot, highly spiced foods or sharp, acidic foods until the ulcers have healed. If an ulcer fails to heal within 3 weeks, consult your physician.

NO Are your gums painful, red and swollen?

YES Inflammation of the gums, usually as a result of inadequate cleaning of the teeth, is the most likely cause of these symptoms. Consult your dentist.

Treatment: Your dentist may recommend an antibacterial mouthwash or an antibiotic. He or she will also scrape away food deposits and calculus (a hard, chalky material that sometimes builds up) from your teeth. The dentist will also show you the most effective way to clean your teeth so that you can prevent the trouble from recurring (see Care of your teeth)

NO Do you have sore places on or around the lips?

YES Did the sores start as painful blisters?

YES Cold sores are the likely cause of these symptoms. They are the results of a virus in the body becoming reactivated by a cold, or exposure to strong sunshine or cold weather.

Self-help: Mild cases of cold sores clear up on their own. However there are many over-the-counter preparations that may relieve symptoms. If you are troubled by severe, recurrent cold sores, your physician may prescribe a cream for you to apply when a sore is in its early stages to inhibit its development.

NO Do you have cracks at the corners of your mouth?

YES Ill-fitting dentures may be the cause of such soreness. Occasionally, however, cracking at the corners of the mouth, may also be a sign of a vitamin deficiency. If you wear dentures, consult your dentist. Otherwise, consult your physician.

Treatment: If dentures are the problem, your dentist may adjust your old baseplate or supply a new set. He or she may also prescribe lozenges to relieve the soreness. If there is a possibility of a vitamin deficiency, your physician will ask you about your diet and examine you to eliminate the possibility of an underlying disease. He or she may prescribe vitamin supplements.
NO Have you recently started to use any new creams or cosmetics on your lips?

YES An allergic reaction to one of the ingredients is a possibility (see also Eczema).

Self-help: Avoid contact with the substance that causes the reaction. If the soreness continues, consult your physician, who may prescribe a salve.

NO Consult your physician if you are unable to make a diagnosis from this chart.

BAD BREATH

You are unlikely to notice that you have bad breath unless it is pointed out to you by a friend. The following are the most common causes of bad breath and are easily remedied:

Sore mouth
I infection or ulceration of the mouth, gums or tongue may cause
I load breath. Rinsing out your mouth with an antiseptic mouthwash L.@s@lly clears up the problem within a few days. If the problem :e---ists, consult your physician.

Inadequately cleaned teeth or Centures
do not clean your teeth (or dentures, if you wear them) thoroughly at east twice a day, this may be the cause of your bad breath. Decaying food particles lodge between the teeth or stick to the dentures (see Care of your teeth, p-76, and Caring for your dentures, right).

Garlic onions and alcohol
These foods contain volatile substances than when absorbed into the bloods,ream and then released into the lungs, 'ra', cause bad breath. Alcohol may also be responsible for bad breath in much same way. Your breath should return
c) normal within 24 hours after consuming hese foods.

Smoking
Smoking always causes a form of bad breath (see also Thedangersofsmoking,

If Your bad breath continues for some
e a symptom of something such as a mouth infection or
e. Consult your physician.
CARING FOR YOUR DENTURES
Always remove your dentures at night and keep them in a glass of water containing a cleansing agent so that they do not dry out and warp. This will also give the gum tissues a regular rest period. Brush your dentures thoroughly every day. Your dentist will show you the best way to do this. It is also important to remember to clean any remaining natural teeth thoroughly, especially where teeth and gums meet. Partial dentures may feel a little tight when inserted in the morning, but this is normal and the feeling disappears in a few minutes. The useful life of dentures varies greatly from 6 months to 5 years or more - depending on how well your gums and jaws keep their shape. If you have a full set of dentures, you should visit the dentist every 2 years. If you still have some natural teeth, you should go for a checkup every 6 months.

Soak your dentures overnight in a cleansing solution.

Brush your dentures daily on both sides to remove all food deposits, Rinse thoroughly before replacing them in your mouth.

Brush any remaining natural teeth carefully twice a day.
41. VOMITING

Vomiting occurs when the muscles around the stomach suddenly contract and "throw up" the stomach contents. This is usually the result of irritation of the stomach from infection or overindulgence in rich food or alcohol, but may also occur as a result of disturbance elsewhere in the digestive tract. Occasionally, a disorder affecting the nerve signals from the brain, or from the balance mechanism in the inner ear, can also produce vomiting. Most cases of vomiting can be treated at home, but vomiting that is accompanied by severe abdominal pain, or by severe headache or eye pain, requires urgent medical attention.

For attacks of vomiting, see chart 42, Recurrent vomiting

Have you vomited on several days in the past week or more and could you be pregnant?

YES  Morning sickness, is a possible cause of your symptoms. If you are unsure whether or no, you are pregnant. Consult your physician. See morning sickness, and go to chart 74, Nausea and vomiting in pregnancy.

NO  Have you had severe abdominal pain for more than an hour that has not been relieved by the vomiting?

YES  EMERGENCY GET MEDICAL HELP NOW!

   A serious abdominal condition, such as appendicitis or a perforated duodenal ulcer, may cause such symptoms.

   Treatment: Eat and drink nothing until medical help arrives. Immediate admission to the hospital may be required. After observation of your symptoms, an exploratory operation may be carried out to find the precise cause of the pain and vomiting (see Laparoscopy). At the same time, any necessary surgical treatment can be carried out.

NO  Did you have a headache before the onset of vomiting?

YES  Go to chart 11. Headache

NO  Do you have severe pain in or around one eye?

YES  CALL YOUR PHYSICIAN NOW!

   Acute glaucoma, in which excess fluid causes increased pressure in the eye, is a possibility, especially if you are over 40.

   Treatment: If your physician confirms the diagnosis, you will probably be given eye drops to allow the excess fluid to brain from the eye. In addition, you may be given a diuretic drug to prevent fluid retention. Once the pressure has been relieved, an operation to prevent a recurrence of the problem is usually carried out.

NO  Do you have diarrhea AND/OR is your temperature 100F (38C) or above?
YES **Gastroenteritis** (inflammation of the digestive tract caused by infection or food poisoning) is probable.

**Self-help:** See Self-help for gastroenteritis, if you are no better in 24 hours, call your physician. He or she may prescribe drugs to relieve your symptoms.

NO In the past few hours, have you done any of the following?
1. overeaten
2. eaten anything spicy or rich (containing buttery or cream sauces)
3. drunk a large amount of alcohol

YES **Gastritis**, inflammation of the stomach lining, can easily occur as a result of such overindulgence.

**Self-help:** Follow the advice on treating vomiting. An over-the-counter antacid medicine should help to relieve any pain. Consult your physician if you are no better in 24 hours.

NO Have you eaten anything that may have gone bad or to which you may be allergic for example, shellfish or fruit?

YES **Food poisoning**, either from food contaminated by bacteria or by poisonous chemicals, or from food to which you are allergic, may be responsible for your vomiting.

**Self-help:** Follow the advice on treating vomiting. If you are no better in 24 hours, or if you develop further symptoms, consult your physician.

NO Before you vomited, did you feel so dizzy that everything around you seemed to spin?

YES A **disorder of the inner ear** may cause vomiting and dizzy spells. Consult your physician.

**Treatment:** Your physician may order balance tests. If you are found to have an inner-ear disorder, you will probably be given medication to relieve the symptoms.

NO Does your skin or do the whites of your eyes look yellow?

YES **Jaundice**, as a result of a liver or gallbladder disorder, is a possibility. Consult your physician.

**Treatment:** Your physician may arrange for you to have blood tests (see Blood analysis) and possibly an ultrasound scan) or a CAT (computerized axial tomography) scan may be required in order to find the cause of the trouble Treatment will depend on the nature of the underlying disorder.

NO Are you taking any medication?

YES Certain medications can cause vomiting as a side effect. Discuss the problem with your physician.

NO **Consult your physician** if you are unable to make a diagnosis from this chart.
NAUSEA
Most disorders that can cause vomiting may also cause nausea (a sensation of impending vomiting) either before or instead of vomiting. So, if you are suffering from nausea, you can find a possible explanation for your symptoms by consulting this self-diagnosis chart for vomiting.

Self-help
If you feel nauseated, do not eat, but take frequent sips of plain water and lie down until the sensation fades or until vomiting relieves it.

VOMITING AND THE PILL
If you are taking birth control pills, and suffer from an attack of vomiting, protection against conception may be reduced. Continue to take your pills as usual, but use an alternative form of contraception as well until you start a new packet.

TREATMENT FOR VOMITING
If you have been vomiting, providing you suspect no serious cause, try the following self-help measures:
1. Eat no solid food until your nausea and vomiting subside.
2. Drink plenty of clear (nonalcoholic) fluids in small sips even if you can not keep anything down for long.
3. Do not smoke.
4. Do not take aspirin.

If you vomit repeatedly for more than 24 hours, or if you develop further symptoms, consult your physician.

WARNING
BLACK BLOOD IN VOMIT
Violent or recurrent vomiting can cause damage to the lining of the esophagus (gullet) and this can result in streaks of red blood appearing in your vomit. Consult your physician if this happens to you. If your vomit contains large quantities of red blood or any black or dark brown matter like coffee grounds (partly digested blood), seek medical help at once: you may have a serious abdominal condition such as a bleeding stomach or duodenal ulcer. It will assist rapid diagnosis of the problem if you keep the vomit containing the blood for the physician to examine.
42. RECURRENT VOMITING

Consult this chart if you have vomited (or felt nauseated) for several days in the past week. Apart from the nausea and vomiting of early pregnancy, most cases of recurrent vomiting are caused by persistent inflammation of the stomach lining or ulceration and are not serious. However, it is important to seek medical advice so that you can obtain effective treatment and to eliminate the slight possibility of a more serious underlying disorder.

For isolated attacks of vomiting, see chart 41, Vomiting.

Could you be in the first months of pregnancy?
YES Morning sickness (nausea and/or vomiting in early pregnancy) is the most likely cause of your symptoms, especially if you have missed a period and feel sick at approximately the same time each day. Consult your physician for a pregnancy test.
Go to chart 74, Nausea and vomiting in pregnancy

NO Do you sometimes get a burning pain in the center of your chest when you are bending over or lying down?
YES A hiatal hernia with reflux causes regurgitation of food and leakage of acid juices into the esophagus (gullet), causing heartburn. The disorder occurs when part of the stomach protrudes through the opening in the diaphragm and is most likely if you are overweight or in the last months of pregnancy (see chart 77, Heartburn in pregnancy). Consult your physician,
Treatment: If you are overweight, your physician will probably recommend that you lose weight (see How to lose weight). Meanwhile, he or she may advise you to take small, frequent meals and to avoid tobacco and alcohol. If you are troubled by heartburn, your physician may prescribe an antacid medication. Alternatively you might try eating a little bread or drinking a glass of milk to relieve the pain. Avoid bending over or lying down after meals and do not wear tight belts or girdles. Raising the head of your bed by about 4 in. should prevent heartburn.

NO Have you been suffering from recurrent bouts of abdominal pain?
YES Is the pain mainly in the center of the upper abdomen?
YES An ulcer in the stomach or duodenum (the tube connecting the stomach to the small intestine) is a common cause of such symptoms. Consult your physician.
Treatment: Your physician will probably arrange for you to undergo tests such as an endoscopy or a barium X-ray to locate the exact site of the ulcer. Your physician is likely to advise you to rest, to avoid tobacco and alcohol and to eat small, frequent meals. He or she may prescribe an antacid or other medication to reduce the amount of acid produced in your stomach.
NO Does the pain spread from under your ribs on the right side of your abdomen?
YES Gallstones in the tube connecting the gallbladder to the digestive tract may be the cause of such symptoms. Consult your physician.
Treatment: Your physician may arrange for you to undergo cholecystography or an ultrasound scan. If gallstones are diagnosed, you will be advised to avoid fatty foods and may be prescribed muscle relaxants for the pain. If symptoms persist, you may need to have an operation. In some cases, drugs to dissolve the stones may be given.

NO Does your skin or do the whites of your eyes look yellow?
YES Jaundice may be caused by a disorder of the liver or gallbladder that also causes vomiting. Consult your physician.
Treatment: Your physician will probably arrange for you to have blood tests (see Blood analysis) and possibly an ultrasound scan or a CAT (computerized axial tomography) scan to find the trouble.

NO Have you lost your appetite AND/OR or more than 10 lb (4.5 kg) in weight within the past 10 weeks?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
An ulcer in the stomach or duodenum or gastritis are the most likely causes of your symptoms, but there is a slight possibility of stomach cancer.
Treatment: Your physician will probably arrange for you to have a barium meal (see Barium X rays) and possibly an endoscopy. Treatment will depend on the underlying disorder. If stomach cancer is diagnosed, the affected can of the stomach may be removed.

NO Does vomiting usually occur a few hours after drinking alcohol?
YES Chronic gastritis (persistent inflammation of the lining of the stomach), a disorder that is aggravated by drinking alcohol, is a possibility (see also The effects of alcohol). Consult your physician.
Treatment: Your physician will probably advise you to eat nothing while vomiting persists and to drink plenty of clear (nonalcoholic) fluids (see Treatment for vomiting.). As you start to feel better, he or she will probably suggest that you gradually introduce some bland foods. If you suffer from abdominal pain, your physician will probably prescribe an antacid. And he or she may
advise you to cut down on your regular alcohol intake.

NO Have you been suffering from recurrent headaches?
YES Do you vomit without preceding nausea?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY! Pressure on the brain as a result of bleeding or a tumor is possible.

Treatment: Your physician will probably arrange for tests such as a CAT (computerized axial tomography) scan and a radioisotopes scan of the brain tissues. Treatment usually consists of either surgery or drugs to reduce the pressure and relieve symptoms.

NO Are you taking any medications?
YES Certain drugs can cause nausea and vomiting as a side effect. Discuss the problem with your physician.
NO Consult your physician if you are unable to make a diagnosis from this chart.

BARIUM X RAYS

Barium sulfate is a metallic compound that is visible on X-ray pictures and is used to show up areas of the digestive tract under investigation. If you need to have an X-ray of the esophagus (gullet), stomach or small intestine, you will probably be given barium in the form of a drink (a barium swallow or meal). X rays will then be taken when the liquid reaches the relevant part of the digestive tract (after about 10 minutes for the esophagus, after 2 to 3 hours for the small intestine). If the large intestine (colon and rectum) is being examined, barium will be given in the form of an enema and the X rays will be taken immediately. Normally, you will be told to eat nothing after midnight on the day before your barium meal or enema. If you are having an enema, you may also be given a laxative to clear the bowel.
43. ABDOMINAL PAIN

Pain between the bottom of the rib cage and the groin can be a sign of a wide number of different disorders of the digestive tract, urinary tract or reproductive organs. Most cases of abdominal pain are due to minor digestive upsets, but severe and persistent pain should always receive prompt medical attention.

Have you had similar bouts of pain on several days over the past week or more?
YES  Go to chart 44. Recurrent abdominal pain
NO  Have you had severe abdominal pain for more than an hour?
YES  Have you vomited without relieving the pain AND/OR is your abdomen tender or swollen?
YES  EMERGENCY GET MEDICAL HELP NOW!
A serious abdominal condition, such as appendicitis or perforated duodenal ulcer, may cause such symptoms.
Treatment: Eat and drink nothing until you get medical help. Immediate admission to the hospital may be required. After observation of your symptoms, an exploratory operation may be carried out to find the precise cause of the pain. At the same time, any necessary surgical treatment - for example, removal of the appendix or repair of an ulcer - can be carried out.
NO  Severe abdominal pain may have a number of different causes and may need expert diagnosis. Consult your physician. If pain persists for more than 4 hours, or if you develop further symptoms, call your physician at once.
Treatment: Eat nothing until you have seen a physician. He or she will examine you and, if unable to make a firm diagnosis, may advise that you be admitted to the hospital for observation and tests.
NO  Have you had diarrhea?
YES  Gastroenteritis (inflammation of the digestive tract caused by infection or food poisoning) is the most likely cause of abdominal pain and diarrhea.
Self-help: See Self-help for gastroenteritis. Call your physician if you notice blood or large amounts of mucus in your bowel movements.
NO  Did the pain start in the small of the back and move to the groin?
YES  A urinary tract disorder, such as an infection or kidney stones, may cause this type of pain. Consult your physician.
Treatment: If your physician suspects an infection, he or she will probably want a urine sample for analysis and will advise you to drink plenty of fluids. If tests confirm the presence of infection, he or she may prescribe antibiotics. If your physician
suspects kidney stones, he or she will arrange for you to have
tests including an intravenous pyelogram. If the diagnosis is
confirmed, the stones may have to be removed surgically or be
broken up by ultrasound waves. Drugs may be given to prevent
the trouble from recurring.

NO Is the pain mainly below the waist?
YES Could you be in the first 3 months of pregnancy AND/OR
have you noticed any vaginal bleeding?
YES CALL YOUR PHYSICIAN NOW!
A serious complication, such as a threatened
miscarriage or ectopic pregnancy (pregnancy
outside the uterus), is possible.

Treatment: If your physician suspects either of
these disorders, you will probably be admitted to
the hospital for rest and tests. If you have an
ectopic pregnancy, an operation to end the
pregnancy will be carried out. See also
Miscarriage.

NO Do you have intermittent cramping pains?
YES Are you having your menstrual period?
YES Go to chart 66. Painful periods
NO Disturbance of the intestines as a
result of a recent change in diet or
anxiety is likely. Consult your
physician if pain persists for more
than 4 hours or becomes severe.

NO Do you have a fever, and pain on one side,
with or without vaginal discharge?
YES Infection of the fallopian tubes
(sometimes known as salpingitis) is
possible. Consult your physician.

Treatment: Your physician will
probably do a vaginal examination
and may take a sample of any
discharge for analysis. He or she is
likely to prescribe aspirin or an
aspirin substitute for the pain and
antibiotics to counter infection. In
severe cases, hospital admission
may be necessary.

NO Do you have a burning pain when
you urinate AND/OR are you
urinating unusually frequently?
YES A urinary tract infection is likely.
Go to chart 52. Painful urination or
to chart 51. Abnormally frequent urination
NO Consult your physician if you are unable to make a diagnosis from this chart.
NO  Is the pain spreading from below the ribs on the right?
YES Gallstones in the tube connecting the gallbladder to the digestive tract may be the cause of this type of pain, especially if you have felt sick or have vomited. Consult your physician.

Treatment: If the pain is severe, your physician may give you an injection to relieve it, and hospital admission may be necessary. You will probably need to undergo cholecystography, or have an ultrasound scan of the gallbladder. If gallstones are diagnosed, you will be advised to avoid fatty foods and prescribed muscle relaxants or an aspirin substitute for the pain. If symptoms persist, you may need to have an operation. In some cases, drugs to dissolve the stones may be given.

NO Is the pain in the center of the upper abdomen?

YES Is it a dull, cramping pain that extends up your chest or down your arms?

YES Heart pain is possible. Go to chart 55. Chest pain

NO Indigestion as a result of overeating or tension is a likely cause of central abdominal pain, especially if it occurred soon after a meal.

Self-help: In order to avoid attacks of indigestion, try not to eat in a hurry and allow yourself about half an hour's relaxation after a large meal. When attacks occur, take one of the many over-the-counter preparations that are available. Consult your physician if the pain becomes severe or if attacks occur frequently.

NO Consult your physician if you are unable to make a diagnosis from this chart.

WARNING
SEVERE ABDOMINAL PAIN
Severe and continuous abdominal pain requires urgent medical attention in the following cases:

1. if it persists for more than 4 hours
2. if it is accompanied but unrelieved by vomiting
3. if the abdomen is swollen and tender
4. if it is accompanied by faintness, drowsiness or confusion.

**Waiting for medical attention**

While waiting for medical help, do not eat or drink anything, in case you need to undergo surgery immediately. Do not take aspirin to relieve the pain or drink alcohol; these can further inflame an irritated stomach and in some circumstances can cause dangerous internal bleeding.
44. RECURRENT ABDOMINAL PAIN

Consult this chart if you have pain in the abdomen (between the bottom of the rib cage and the groin) of a similar type on several days in the course of a week or more. Most cases of recurrent abdominal pain are the result of long-standing digestive problems that can be remedied by drugs from your physician, possibly combined with a change in eating habits. However, early diagnosis is always necessary to eliminate the slight possibility of serious underlying disease of the stomach, bowel or reproductive organs.

For isolated attacks of abdominal pain, see: chart 43. Abdominal Pain.

Is the pain mainly above the waist?

YES  Do you sometimes get a burning pain in the center of your chest when you are bending over or lying down?

   YES  A hiatal hernia with back up of acid juices (acid reflux) into the esophagus

(gullet) may be causing heartburn. The disorder occurs when part of the stomach protrudes through the opening in the diaphragm and is most likely if you are overweight or in the last months of pregnancy (see chart 77, Heartburn in pregnancy). Consult your physician.

**Treatment:** If you are overweight, your physician will probably recommend that you lose weight (see How to lose weight). Meanwhile, he or she may advise you to take small, frequent meals and to avoid tobacco and alcohol. If you are troubled by heartburn, your physician may prescribe an antacid medication.

Alternatively you might try eating a little bread or drinking a glass of milk to relieve the pain. Avoid bending over or lying down after meals and do not wear tight belts or girdles. Raising the head of your bed by about 4-in. should prevent heartburn.

NO  Is the pain relieved by an antacid medication for indigestion?

YES  **Gastritis** (inflammation of the stomach) or a stomach ulcer are the most likely causes of the pain.

**Self-help:** During an attack of pain, eat nothing but drink plenty of fluids. An over-the-counter antacid will also help. Do not smoke or drink alcohol. To prevent attacks from occurring in the future, avoid eating large meals containing rich foods. If you smoke or drink heavily, you should make a serious attempt to cut down. If, in spite of these measures, attacks of pain recur, consult your physician, who may prescribe more effective medicine and may arrange for you to have a barium meal (see Barium X-rays), and an endoscopy.
NO Does the pain spread from below the ribs on the right?
YES Gallstones in the tube that connects the gallbladder to the digestive tract may be the cause of this type of pain, especially if you have felt nauseated or have vomited. Consult your physician.

Treatment: Your physician may arrange for you to undergo a cholecystography or to have an ultrasound scan of the gallbladder. If gallstones are diagnosed, you may be advised to avoid fatty foods and prescribed muscle relaxants or an aspirin substitute for the pain. If symptoms persist, you may need to have an operation. In some cases, drugs to dissolve the stones may be given.

NO Have you lost your appetite AND/OR over 10 lb. (4.5 kg) in weight in the past 10 weeks?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
An ulcer in the stomach or duodenum is the most likely cause of your symptoms, but there is a slight possibility of cancer.

Treatment: Your physician will probably arrange for you to have a barium meal (see Barium X rays) and possibly endoscopy. If you are found to have an ulcer, you will probably be advised to avoid tobacco ad alcohol and to eat small, frequent meals. Your physician will a so prescribe an antacid or other medications to reduce the amount of acid in your stomach. Stomach cancer is usually treated surgically.

NO Is the pain mainly below the waist?
YES Do you have fever and pain on one side?
YES Infection of the fallopian tubes (sometimes known as salpingitis) is possible. Consult your physician.

Treatment: Your physician will probably do a vaginal examination and take a sample of the discharge from your vagina for analysis. You may also need to have a D and C and/or laparoscopy. If the diagnosis is confirmed, your physician is likely to prescribe aspirin or aspirin substitute for the pain and antibiotics to counter infection. In severe cases, admission to the hospital may be necessary.

NO Have you been having bouts of diarrhea?
YES Have you also been intermittently constipated?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
Irritable colon or diverticular disease (in which swellings develop on the walls of the large intestine may be the cause of your symptoms. However, the slight possibility of bowel cancer also needs to be ruled out.

Treatment: To make an exact diagnosis, your physician may need to arrange for tests such as a barium enema (see Barium X-rays) and an endoscopy. The long term treatment for both irritable colon and diverticular
disease is based on a high-fiber diet. Your physician may also prescribe drugs to relieve your symptoms.

NO Crohn's disease or ulcerative colitis may cause lower abdominal pain and diarrhea. The former is a patchy inflammation of the intestines, the latter is inflammation and ulceration of only the large intestine. Consult your physician. Seek medical help without delay if you have passed blood in your stools.

**Treatment:** A severe attack of ulcerative colitis may require hospital admission. In any case, you will probably need to have tests such as a barium X ray, sigmoidoscopy and analysis of samples of your stools. If you are found to have either Crohn's disease or ulcerative colitis, you will probably be put on a bland diet and may be given a course of anti-inflammatory drugs.

NO Are you pregnant?

YES Periodic tightening of the muscles around the uterus (false labor or Braxton Hicks contractions) occur throughout pregnancy. These make your abdomen feel hard and tense for about 30 seconds, but should not cause actual pain. Call your physician if contractions accompany vaginal bleeding, or are painful. Another cause is round ligament pain. This pain usually occurs during the middle trimester, occurs on one side and is relieved by lying on the affected side. In late pregnancy, an increase in the frequency and strength of these contractions may signal the start of labor. (See chart 81. Am I in labor?)

NO Consult your physician if you unable to make a diagnosis from this chart.

**IRRITABLE COLON**

Many people who suffer from recurrent cramping pains in the lower abdomen with or without intermittent diarrhea and/or constipation have no serious underlying disorder and are diagnosed as having an irritable colon (or irritable bowel syndrome). It is thought that the disorder is caused by abnormally strong and irregular muscle contractions in the colon. This may be due to sensitivity to the passage of matter through the intestines, but it may also be linked to psychological stress (see What is stress?). A large proportion of those with this complaint are anxious, and attacks seem to be made worse by worry. Most sufferers learn to live with the problem without specific treatment. A high-fiber diet often relieves the symptoms. Those who suffer from severe pain may be prescribed antispasmodic drugs.
45. SWOLLEN ABDOMEN

A generalized swelling over the whole abdomen (the area between the bottom of the rib cage and the groin) suggests a condition affecting the digestive or reproductive organs. If your abdomen is painful as well as swollen, this is an emergency and you should seek medical advice immediately.

Did the swelling develop suddenly during the past 24 hours?
YES Have you had severe abdominal pain for more than an hour?
YES Does passing gas relieve the pain?
YES Go to chart 46. Excess gas
NO EMERGENCY GET MEDICAL HELP NOW! An intestinal obstruction is a possibility, especially if you are vomiting and/or are not passing gas or bowel movements.
Treatment: You will be admitted to the hospital, where you may need to have X-rays to find the exact site and cause of the blockage. If the blockage is due to impacted stools, it may be cleared by an enema. If not, then surgery to deal with the blockage may be necessary.

NO Sudden abdominal swelling that is not accompanied by severe and continuous pain is most likely to be the result of gas in the colon. Go to chart 46. Excess gas

NO Might you be pregnant?
YES Pregnancy is a possibility. Consult your physician (See also Pregnancy testing.)

NO Did the swelling develop just before or during, your period?
YES Hormonal changes at this time of the month may cause your abdomen to become slightly puffy, you are distressed by this, or if you suffer from additional symptoms such as irritability or depression, consult your physician.
Treatment: Your physician may decide to give you a diuretic and, if you are overweight, advise you lose weight (see How to lose weight). He, she may also prescribe hormones either in the form of the birth-control pill or as tablets or vaginal suppositories to be taken in the 10 days before period.

NO Do you suffer from persistent constipation?
YES Go to chart 48. Constipation

NO Are your ankles puffy AND/OR do they pit when you press them with your finger?
YES Retention of urine in the bladder may cause such swelling.
Treatment: If urine retention is diagnosed, you will probably require tests such as an intravenous pyelogram. Treatment will depend on the underlying disorder.

NO Does the swelling lessen slightly when you pass urine?
CONSULT YOUR PHYSICIAN WITHOUT DELAY! Retention of urine in the bladder may cause such swelling. **Treatment:** If urine retention is diagnosed, you will probably require tests such as an *intravenous pyelogram*. Treatment will depend on the underlying disorder.

Are you overweight according to the chart 4. AND is your navel deeply sunken?

**YES** Obesity is likely to be the problem.

**Self-help:** The only way to lose weight is to take in fewer calories (units of energy) than you burn up, so that you use up your body's fat reserves. For more detailed advice on how to go about this, see How to lose weight.

**NO** Consult your physician if you are unable to make a diagnosis from this chart and your abdomen remains swollen for more than 48 hours.
Excess gas in the digestive system may cause an uncomfortable, distended feeling in the abdomen and may produce rumbling noises in the intestines. Expulsion of gas, either through the mouth or the anus, generally relieves these symptoms temporarily. Although it may be embarrassing, passing gas is rarely a sign of an underlying disease. In most cases, gas is caused by swallowing air or by certain foods not being properly digested, leaving a residue that ferments, producing gas in the intestines. Different foods affect different people - though onions, cabbage and beans are common causes of gas.

Is the gas expelled by belching?

YES  Are you pregnant?

YES  Swallowing air to relieve either nausea (in early pregnancy) or heartburn (in later pregnancy) may add to your bloating and cause you to belch more than usual See also chart 74, Nausea and vomiting in pregnancy, and chart 77, Heartburn in pregnancy.

Self-help: Avoid eating gas-producing foods, such as onions, bean and cabbage: these will make the problem worse.

NO  Do you sometimes have a burning pain in the chest?

YES  A hiatal hernia with reflux causes leakage of acid juices into the esophagus (gullet), causing pain (often known as heartburn) and you may be swallowing air to relieve the discomfort. The disorder occurs when part of the stomach protrudes through the opening in the diaphragm and is most likely if you are overweight. Reflux may occur in the absence of hiatal hernia. Consult your physician.

Treatment: If you are overweight, your physician will probably recommend that you lose weight; this will almost certainly help the problem (see How to lose weight). Meanwhile, he or she may advise you to take small, frequent meals and to avoid coffee, tobacco and alcohol, all of which may aggravate stomach and digestive disorders. If you are troubled by heartburn, your physician may also prescribe an antacid medication. Alternatively, you might try eating a little bread or drinking a glass of milk to relieve the pain. Avoid bending over or lying down after meals and do no wear tight belts or girdles. Raising the head of your bed by about 4 in. using bricks or books should prevent heartburn at night.

NO  Do you often have an uncomfortable feeling of fullness after meals?

YES  Indigestion is often accompanied by gas. This may be because you swallow air while eating, especially if you eat fast. You may than regurgitate the air as gas in order to relieve discomfort, which may establish a vicious cycle.

NO
Self-help: In order to avoid attacks of indigestion, try to eat more slowly, and allow yourself about half an hour's relaxation after a large meal. When attacks occur, take one of the many-over-the-counter antacid preparations. Consult your physician if you have severe pain or if attacks occur frequently.

NO Swallowing air without realizing it - possibly as a nervous habit may be causing your gas. If the problem worries you, consult your physician.

NO Have you recently been eating high-fiber or gas producing foods, such as beans, or have you been drinking beer?

YES High-fiber foods and drinks containing yeast often generate gas in the intestines. Soda drinks are an obvious source of gas. This is no cause for medical concern but, if it makes you uncomfortable or embarrassed, it may be advisable to limit your intake of these foods and drinks.

NO Do you have bouts of lower abdominal pain that are relieved by the passage of gas or by defecation?

YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Irritable bowel or diverticular disease (in which swellings develop on the walls of the large intestine) may be the cause of your symptoms. However, the slight possibility of bowel cancer also needs to be ruled out.

Treatment: To make an exact diagnosis, your physician may need to arrange for tests such as a barium enema (see Barium X-rays) and endoscopy. The long-term treatment of both irritable bowel and diverticular disease is based on a high-fiber diet. Your physician may also prescribe drugs to relieve pain.

NO Are your bowel movements pale, bulky and particularly foul-smelling?

YES Malabsorption (failure of the digestive system to break down food properly or of its nutrients to be properly absorbed into the bloodstream) is a possibility. Consult you physician.

Treatment: If your physician suspects malabsorption, he or she may take samples of blood and stools. This will enable the levels of proteins, fats and minerals to be measured. Once the condition is diagnosed, your physician may arrange for further tests to determine the underlying cause of the disorder.

NO Consult your physician if the problem worries you and you cannot make a diagnosis from this chart. However, your gas is most unlikely to be caused by a serious disorder.
47. DIARRHEA

Diarrhea is the passing of unusually loose and frequent bowel movements. It is rarely a dangerous symptom, but it may cause discomfort and is often accompanied or preceded by cramping pains in the lower abdomen. In this country, most attacks of diarrhea are the result of infection and last no more than 48 hours. No special treatment is usually needed other than ensuring that you drink enough fluids. However, if diarrhea persists or recurs, it should be reported to your physician. Remember, if you are taking a birth-control pill and have diarrhea for more than 24 hours, your protection against pregnancy may be reduced and you should use another means of contraception for the remainder of your cycle (see chart 72, Choosing a contraceptive method).

Have you had other attacks of diarrhea during the past few weeks?
YES Have you so been intermittently constipated?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Irritable bowel or diverticular disease (in which swellings develop in the walls of the large intestine) may cause such symptoms. However, the slight possibility of bowel cancer also needs to be ruled out.

Treatment: To make an exact diagnosis, your physician may need to arrange for tests such as a barium enema (see Barium X-rays) and sigmoidoscopy. The long-term treatment for both irritable bowel and diverticular disease is based on a high-fiber diet (see The benefits of a high-fiber diet) Your physician may also prescribe drugs.

NO Have you been having bouts of lower abdominal pain?
YES Go to chart 44. Recurrent abdominal pain
NO CONSULT YOUR PHYSICIAN WITHOUT DELAY!

A persistent change in bowel habit should always be investigated to rule out the possibility of bowel cancer.

Treatment: Your physician may arrange for you to undergo diagnostic tests such as a barium enema (see Barium X-rays) and sigmoidoscopy. Treatment will depend on the underlying disorder.

NO Have you noticed red blood in your bowel movements?
YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!

Ulcerative colitis, in which raw, inflamed areas develop along the intestines, is a possibility. However, dysentery may be a possibility (see Traveler's diarrhea).

Treatment: A severe attack of ulcerative colitis may require hospital admission. In any case, you will probably need to undergo tests such as a barium X-ray, sigmoidoscopy and analysis of samples of stools. If you are found to have ulcerative colitis, you will probably be put on a bland diet and may be given anti-inflammatory drugs.
NO Have you felt sick or been vomiting AND/OR is your temperature 100F (38C) or above?
YES Gastroenteritis (inflammation of the digestive tract as a result of infection or food poisoning) is probable.


NO Have you eaten anything in the past 24 hours that might have gone bad OR to which you may be allergic?

NO Are you taking any medications?
YES Certain drugs may cause diarrhea as a side effect. Discuss the problem with your physician.

NO Gastroenteritis (above right) is likely.

TRAVELLER'S DIARRHEA
A visit to a hot country may expose you to the risk of diarrhea caused by bacteria found in inadequately purified water and in contaminated milk and food. Therefore, eat only well cooked food, and drink only water and milk that have been boiled or sterilized.

Dysentery
Dysentery is a serious digestive-tract infection that is more common in hot countries but one that occurs in the U.S. as well. It causes violent blood-stained diarrhea with fever, vomiting and abdominal pain. If you have these symptoms, seek medical help without delay.

SELF-HELP FOR GASTROENTERITIS
If you have gastroenteritis, the following self-help measures should help you to recover quickly:
1. Eat no solid food while symptoms persist.
2. Drink at least 1 pint more than usual of clear, unsweetened fluids (not milk).
3. If you are vomiting, take the fluid in frequent sips.
4. If you are passing a lot of watery diarrhea, add a half teaspoonful of salt to every 2 pints of fluid, or use ready-made packets of glucose and mineral powder available at a drugstore.
5. Do not take aspirin or other painkillers.

If you are no better in 48 hours, or if you notice any blood in your bowel movements consult your physician.
48. CONSTIPATION

Normal bowel habits vary from person to person - many people have one or more bowel movements a day, but a few have four or five a day. Constipation occurs only when the stools are dry, hard and painful or difficult to pass. This is more likely to occur when stools are passed more infrequently than you are used to.

Have you always suffered from constipation?

YES Do you often resist the urge to defecate because you are too busy?

YES Putting off defecation may lead to a loss of normal bowel reflexes, causing constipation.

Self-help: Make a conscious effort to go to the toilet promptly whenever you feel the need. You will probably find that your reflexes have returned to normal within a few weeks. You may also find it helpful to eat more high-fiber foods (see The benefits of a high-fiber diet) and to get more exercise.

NO Have you used laxatives regularly for a long time?

YES Overuse of laxatives will usually make your bowels inactive and may create a habit.

Self-help: Stop using laxatives and try adding bran and extra fruit to your diet (see The benefits of a high-fiber diet). This should relieve your constipation in a natural way and allow your body to return to normal. If your constipation persists for more than 2 weeks, consult your physician.

NO Lack of fiber in the diet is the most common cause of persistent constipation.

Self-help: Try to eat more foods with a high-fiber content (see The benefits of a high-fiber diet). If your problem is no better in 2 weeks, consult your physician.

NO Has defecation become painful?

YES A tear in the lining of the anus (anal fissure) or hemorrhoids (swollen veins around the anus) or both may cause such pain. Consult your physician.

Treatment: Your physician will examine you to make an exact diagnosis. If you have an anal fissure, your physician will probably advise you to add more fiber to your diet to prevent constipation (see The benefits of a high-fiber diet). If this treatment fails to cure the problem, a minor operation may be recommended. Treatment of hemorrhoids is outlined in the box on.

NO Are you taking any medications?

YES Certain drugs can cause constipation as a side effect. Discuss the problem with your physician.

NO Do you have bouts of cramping pain in the lower abdomen?
YES Have you had similar episodes of pain and constipation in the past few years?

YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!
Irritable bowel diverticular disease (in which swellings develop in the walls of the large intestine) may cause such symptoms. However, the slight possibility of bowel cancer also needs to be ruled out.

Treatment: To make an exact diagnosis, your physician may need to arrange for tests such as a barium enema (see Barium X rays) and sigmoidoscopy. Treatment of both irritable bowel and diverticular disease is based on a high-fiber diet. Your physician may also prescribe drugs.

NO Are you pregnant?

YES Relaxation of the intestine occurs especially during early pregnancy and can lead to constipation. An increase in your daily intake of fluid and fiber should relieve the problem. If constipation persists, avoid taking laxatives and consult your physician.

NO Lack of fiber in the diet is the most likely cause of constipation (see The benefits of a high-fiber diet). If your bowel habits have not returned to normal within 2 weeks, consult your physician.

THE BENEFITS OF A HIGH-FIBER DIET

Most plant matter contains a proportion of indigestible material known as fiber (or roughage). This is very important in our diet. It provides the bulk that helps the large intestine carry away body waste and keeps the stools soft. Those who eat plenty of fiber in their diet are less likely to develop cancer of the large intestine and other bowel problems. Finally, a high-fiber diet may help you to lose weight, because fiber fills you up providing extra calories.

High-fiber foods
The foods listed below all contain high proportion of fiber.
1. unrefined cereals and cereal products, such as bran and whole-grain bread
2. fruit and vegetables
3. beans and other legumes
49. ABNORMAL-LOOKING BOWEL MOVEMENTS

Most minor changes in the color, shape and consistency of your bowel movements are due to a recent change in diet. But if the stools are black or significantly lighter than usual, or if they are streaked with blood, this may indicate something more serious and you should consult your physician.

Have you noticed red blood in your bowel movements?

YES   Do you feel sick AND/OR is your temperature 100F(38C) or above?

   YES CONSULT YOUR PHYSICIAN WITHOUT DELAY!

   Ulcerative colitis, in which raw, inflamed areas develop along the colon, is possible. You should also consider the possibility of dysentery (see Traveler's diarrhea).

   Treatment: You may need to undergo tests such as a barium X ray, sigmoidoscopy, and analysis of samples of bowel movements. If you are found to have ulcerative colitis, you will probably be put on a bland diet and may be given a course of anti-inflammatory drugs.

   NO CONSULT YOUR PHYSICIAN WITHOUT DELAY!  Hemorrhoids (swollen veins around the anus) are the most common cause of blood in the bowel movements, but your physician will want to rule out the slight possibility of a serious underlying disorder.

   Treatment: Treatment of hemorrhoids is outlined in the box opposite.

NO Are your bowel movements very dark or black OR do they contain black material?

YES Are you taking iron tablets?

   YES Iron tablets often cause darkening of the bowel movements and may also cause constipation. Discuss this with your physician.

   NO CONSULT YOUR PHYSICIAN WITHOUT DELAY!

   Bleeding in the digestive tract, perhaps from an ulcer, is a possibility.

   Treatment: Your physician will probably arrange for you to undergo tests such as endoscopy, a biopsy of the stomach lining and a barium X ray. These tests should reveal the underlying cause of your symptoms.

NO Are your bowel movements unusually pale?

YES Does your skin or do the whites of your eyes look yellow?

   YES A liver or gallbladder disorder is a possibility. Consult your physician.

   Treatment: Your physician will probably need to take blood and stool samples. This may differentiate hepatitis from obstructions of bile flow. Once the condition is diagnosed, he or
she may arrange for further tests to determine the underlying cause of the disorder.

**NO Malabsorption** exists when your digestive system fails to break down food properly or its nutrients fail to be properly absorbed into the bloodstream. However, pale bowel movements may also occur normally for a few days after a bout of diarrhea and/or vomiting. Consult your physician.

**Treatment:** If malabsorption is suspected, your physician may ask for samples of blood (see *Blood analysis*) and bowel movements. This will enable the levels of proteins, fats and minerals to be measured. Once the condition is diagnosed, he or she may arrange for further tests to determine the underlying cause of the disorder.

**NO Consult your physician** if you are unable to make a diagnosis from this chart.

**SIGMOIDOSCOPY**

When physicians want to examine the lower part of the large intestine visually, they use a technique called sigmoidoscopy. This involves inserting either a hollow metal rod containing a light source or a flexible fiberoptic tube into the rectum. Air is then passed up the tube. This makes the intestine expand slightly so that viewing, with the aid of the light source, is easier. The type of tube used varies according to the part of the intestine the physician wants to examine. For examination of the rectum, a short, rigid tube is often used but, for deeper investigations, a longer, flexible tube is more suitable. The procedure is uncomfortable rather than painful, takes only a few minutes and is helpful in diagnosing serious bowel problems at an early stage. Your physician may suggest that you have an enema before the investigation.

**WARNING BLOOD IN BOWEL MOVEMENTS**

Blood in your bowel movements may, in some cases, be an indication of cancer of the large intestine. Early treatment of this type of cancer greatly increases the chance of a cure. **Consult your physician without delay!**
50. ANAL PROBLEMS

The anus is a short tube that leads from the rectum to the outside. The anus is closed by a ring of muscles (or sphincter). The most common disorder affecting this area is swelling or plugging from clots of the veins around the anus (hemorrhoids). This is often caused by and associated with painful constipation.

Have you noticed any bleeding from the anus?

YES  **CONSULT YOUR PHYSICIAN WITHOUT DELAY!**

**Hemorrhoids**, swollen veins around the anus, are the most likely cause of such bleeding, but your physician will want to rule out the slight possibility of a serious underlying disorder.

**Treatment:** Your physician will examine you. If hemorrhoids are diagnosed, you will be treated as outlined in the box below. If your physician suspects the possibility of another problem, he or she will refer you for tests such as sigmoidoscopy and a barium enema.

NO  Is having a bowel movement painful?

YES  **Anal fissure** (a tear in the lining of the anus) or hemorrhoids or both may cause such pain. Consult your physician.

**Treatment:** Your physician will examine you to make an exact diagnosis. If you have an anal fissure, your physician will probably advise you to add more fiber to your diet to prevent constipation (see The benefits of a high-fiber diet). If this treatment fails to cure the problem, a minor operation may be recommended. Treatment of hemorrhoids is outlined in the box below.

NO  Do you have itching around the anus?

YES  Have you noticed white, threadlike particles in your stools?

YES  **Pinworms** may cause such symptoms. These harmless parasites may be passed on from one person to another or may be picked up from contaminated food. Consult your physician.

**Treatment:** You will probably be given medicine to get rid of the worms. The whole family may need to be treated. Until you have completed the treatment, be especially careful to **wash** your hands thoroughly after going to the toilet and before preparing food.

NO  **Pruritus ani** is the term used to describe itching around the anus for which there is no obvious physical case. Consult your physician.

**Treatment:** If your physician can find no cause for your itching, he or she will probably suggest the following ways to reduce the irritation. Try to resist the urge to scratch. Wash the anus carefully twice a day, using mild, unscented soap. Use only soft
toilet paper and wipe gently. Avoid tight underpants made of artificial fibers; cotton is best. Your physician may also prescribe an ointment.

NO  Do you have wart-like lumps around the anus?
YES  Anal warts may be caused by a virus infection. Consult your physician.

Treatment: Your physician will probably refer you to a skin clinic, where the cause of the infection will be investigated. The warts may be removed under local anesthetic by freezing, by certain chemicals, or they may be burned off.

NO  Consult your physician If you are unable to make a diagnosis from this chart

HEMORRHOIDS AND PREGNANCY

Many women develop hemorrhoids during pregnancy. This is because the growing baby causes compression of, and increased pressure in, the veins in the pelvic area. Relaxation of the blood vessels as a result of hormonal changes may also contribute to the problem. It is therefore particularly important during pregnancy to ensure that you prevent constipation and straining by eating a high-fiber diet.

TREATMENT FOR HEMORRHOIDS

Self-help
People with hemorrhoids should be careful to include plenty of high-fiber foods in their diet (see The benefits of a high-fiber diet). This helps to keep the stools soft, preventing painful constipation, which causes and aggravates the condition. It is also important to avoid straining when defecating, which increases the pressure on the swollen veins, and to keep the anal area clean and dry. In many cases these self-help measures control the problem without the need for further treatment.

Professional treatment
Your physician will probably prescribe a cream or suppositories to shrink the hemorrhoids. If the hemorrhoids persist or are particularly troublesome, your physician may refer you to a surgeon’s office where you may be offered one of several different treatments. The hemorrhoids may be injected with special chemical to shrink them, or they may be destroyed by freezing – a technique known as cryosurgery. In other cases, a method called banding may be used. This involves placing a tight band around the base of the swollen vein, which then withers away over the next few days.

Surgical removal of hemorrhoids (hemorrhoidectomy) under general anesthetic is generally not necessary.