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HOME SANITATION

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The subject of home sanitation is rather broad in its scope. All conditions which have a bearing upon the health of the family in the home are proper subjects for study by one interested in this subject. The problems of home sanitation in the last analysis, however, usually resolve themselves into problems of heating, lighting and ventilation within the home itself; the disposal of waste and general cleanliness within and surrounding the home, and the care of the drinking water and food. Unsanitary surroundings and lack of care, usually due to a lack of knowledge, may cause us to harbor unwelcome guests, the most noticeable of which are insects, animals, and many other guests less conspicuous, perhaps, but for that reason all the more dangerous to health, such as disease germs from infected persons and bacteria which spoil our food.

In this circular are given some of the results of unsanitary conditions and how they may be overcome, and, in conclusion, suggestions for making the home in general more sanitary.

DISEASES

Typhoid Fever

Typhoid fever is a disease transmitted through food or liquid which has become fouled by the excreta of infected persons. Flies may carry the disease, so toilets should be carefully screened from them. Precaution should be taken that sewage water does not enter the supply of drinking water, and care should be taken to guard against surface drainage.

Malaria

Malaria is a disease transmitted from one person to another through the agency of a variety of mosquito. As these mosquitoes breed in stagnant water, a little kerosene placed upon all stagnant water within 200 yards of the home will not only make these places poor breeding ground for this variety of mosquito, but for all other varieties as well, making the home a more comfortable place in which to live.

Hookworm

The hookworm is a small intestinal parasite which attaches itself to the lining of the intestines and lives upon the blood of the host. The eggs are discharged with the waste products from the body. These eggs hatch in a short period of time, and the little worms when coming in contact with a portion of the body burrow their way through the skin, where they are carried by the blood stream to the lungs. They crawl up the air passages and are caught up and swallowed by the infected individual, where they attach themselves to the lining of the intestines to repeat the same cycle. Careful disposal of waste matter from the body and the use of sanitary toilets are advisable.

Tuberculosis

Tuberculosis is a bacterial disease which is transmitted through discharges from the mouth and nose, as well as the intestines of an infected person. The most common form recognized is tuberculosis of the lungs, or consumption, but it may attack any portion of the body. Tuberculosis of the glands of the body is usually due to drinking milk from tubercular cows. About one-half of the children who have tuberculosis are afflicted with the latter form. Tuberculosis is usually contracted before the age of twelve years, and most of the deaths occur between the ages of fifteen and forty.

Care should be exercised in the disposal of waste from people known to be afflicted with this disease, and it is especially dangerous for tubercular people to be associated with children.

Dysentery

Dysentery, cholera infantum and other diseases of the alimentary canal are due to unsanitary conditions, and may be traced to the water supply or food.

INSECT PESTS

Flies

Flies will breed in almost any sort of moist filth, such as human excreta, but barnyard manure is the favored larval food. Flies carry germs of typhoid fever, tuberculosis, 'cholera, dysentery, cholera infantum or "summer complaint", and other diseases, and are therefore intimately associated with unsanitary surroundings.

Method of Fighting Flies-

1. Destroy, remove or screen manure piles and other decaying vegetable or animal matter which may be used as breeding places. Chloride of lime, kerosene or one of the numerous coal tar disinfectants sprinkled freely over breeding places will destroy the larva and is rather inexpensive.

- 2. Make toilets flyproof by careful screening.
- 3. Keep the yard around the house and the barnyard clean.
- 4. Garbage should be quickly disposed of, and if allowed to stand more than twenty-four hours, it should be screened.
 - 5. The house should be screened.
- 6. Energetic use of the fly-swatter within a well-screened house does much toward lessening the danger from disease.
- 7. Flytraps are very satisfactory within the house to supplement the fly-swatter, and large traps should be used near breeding places if they cannot be well disinfected.
- 8. Insect powders burned in a closed room will kill all the flies in the room, and is a quick way of disposing of them.

Mosquitoes

There are several varieties of mosquitoes. Some are harmless, while one transmits malaria, and another yellow fever, provided they become infected.

Method of Extermination-

- 1. Oil all stagnant water within 200 yards of the house.
- 2. Drain or fill up all watery places.
- 3. Remove all underbrush, long grass and damp piles of material which may serve as breeding places.
- 4. Dispose of all such receptacles as barrels, tin cans, etc., holding water, which may serve as breeding places, either by removing or screening.
- 5. Goldfish or minnows introduced into water tanks and the neighboring ponds which tend to become stagnant will help materially in controlling these insects.

Ants

Ants live in colonies, and for that reason, when food is located, they attack it in large numbers, and may become very serious pests.

Method of Extermination-

- 1. If possible, find the colony and saturate it with kerosene. By this means the queens which lay the eggs, as well as all workers and the young, are destroyed.
- 2. Place sponges saturated with a syrup made of sugar annd borax, or arsenic, where the ants are most numerous. If borax or arsenic is not

available, sponges may be saturated with sweetened water, and when full of ants may be dropped into boiling water; or saturate sponges with sweetened water and place in jars with perforated lids and place near the colony.

Cockroaches

Cockroaches thrive best in damp places, and their breeding places may be looked for in such situations. More food is spoiled by cockroaches traveling around over it than the real damage by consumption.

Method of Extermination-

- 1. A paste made of sweetened flower containing 2% of yellow phosphorus placed in locations where cockroaches are numerous is very satisfactory.
- 2. Sprinkle borax freely around damp places where cockroaches may breed. This treatment should be repeated frequently for two or three weeks.
- 3. Make a mixture of 1 pint plaster of paris and 3 parts of flour and place near accessible moisture. This insecticide depends for its efficiency upon a supply of water near at hand. The dry mixture might be connected with a dish of water by means of a pasteboard bridge.

Bedbugs

Bedbugs are suspected of carrying a number of diseases, so are to be considered dangerous pests. Their natural food is human blood.

Method of Extermination-

- 1. Kerosene, benzine or gasoline may be forced into the cracks in the floors and in the beds in an infested room. This should be repeated at intervals of three or four days.
- 2. Pour boiling water over furniture that will not be injured by this treatment.
- 3. Make a mixture of 1 ounce of corrosive sublimate, 1 pint of alcohol (either wood or grain), and 1 cup of spirits of turpentine, and use the same as in Method 1.
- 4. Burn sulphur in the presence of moisture in a closed room, or use formaldehyde and permanganate (ask your druggist about using formaldehyde and permanganate).

Fleas

Fleas are very annoying. They breed in dust, and may be found in dusty carpets, or in the cracks of the floors where a house becomes badly infested. Cats and dogs serve as distributors.

Method of Extermination-

- 1. Keep cats and dogs around the house free by giving them a bath with soap and water, using a few drops of carbolic acid in the water.
 - 2. Fumigate as for bedbugs.
- 3. Sprinkle floors with flake naptholene and keep the rooms closed for twenty-four hours. The fumes destroy the fleas without injury to the contents of the room. (Home Economics Bulletin No. 5, Ames. Iowa.)

Moths

The full-grown moths have wings and look like white or gray butterflies or millers. They lay eggs which hatch into pupae which destroy clothing in the neighborhood. They will infest unused articles of clothing, especially clothing made of wool.

Method of Extermination-

- 1. Clothing should be sunned and brushed frequently during the sum mer months.
- 2. Closets which become infested may be fumigated by burning sulphur.
- 3. Cedar chests, mothballs and tobacco are effective only in that the adult will not lay eggs where the odors of any of these are strong.

ANIMAL PESTS

Rats and Mice

Rats and mice are thought to be disease carriers, so are not only very annoying pests, but it is difficult to keep a home sanitary with their presence. Vigilant war should be made on them.

Method of Extermination-

- 1. The use of traps will reduce the numbers.
- 2. Barium carbonate spread over food is a very destructive agent to both rats and mice, and is harmless to other animals and children.

WATER SPPPLY

Water is unsafe for drinking purposes which contains disease germs, sewage, germs from manure piles or from a yard or barns. Water from deep wells is always considered safer than shallow wells. Springs which habitually run dry shoould be avoided, as they are usually of shallow origin. Wells and cisterns should be located so that no surface water can drain into them, and they should be covered by a platform bulit over them

which will prevent filth of any kind from washing in from the top. Cement is the best material to use for this purpose.



Dust is finely divided soil, and around the house, especially, is mixed with finely powdered filth and hence becomes a potential distributor of disease. A home that is kept free from dust is a more delightful place in which to live as well as being more sanitary.

Methods of Removing or Keeping Dust Down

- 1. Use cloths slightly oiled or dampened for removing dust. Never use a feather duster for it does not remove but rather scatters the dust.
 - 2. Wash dust cloths and hang in the sun to dry.
- 3. Dust the floors around the rugs with a dustless mop of some kind. When sweeping use a broom slightly dampened with clean water or sprinkle the floor with some sweeping compound or dampened sawdust preparation. After sweeping take up the dust and burn.
- 4. A vacuum cleaner is a most effective way of removing dust, which serves to make the surroundings more sanitary.

METHODS OF MAKING SURROUNDINGS MORE SANITARY

1. Out Buildings.

- a. The outside toilet should be 200 feet or more from the well or cistern and should drain away from it. The pit should be eight or ten feet deep with crude oil in the bottom, or well rotted horse manure may be used in the pit. A pipe should extend from the pit above the building to carry away foul or poisonous gases. Covers should be placed over the openings. The building should be kept dark and well screened. The method used by the Reclamation Service which has proven very satisfactory is the use of double screen doors about four feet apart.
- b. Stables should be cleaned daily. No manure should be left in piles within one-half mile of the house, as these will become breeding places for flies. If it is necessary to leave the manure in piles, they should be screened or sprayed frequently with insecticides.
- 2. Grounds should be kept free of all rubbish, underbrush and decayed material. A receptacle should be provided for tin cans and trash. They should be removed frequently. Stagnant water even in small receptacles such as tin cans should be sprayed with kerosene.
 - 3. Garbage should be kept in closed cans and burned or taken at least

one-half mile from the house. The garbage can that opens by pressure with the foot on the lever is the most convenient kind to use. Your hardware merchant has them, or can order them. Plenty of fresh air and sunlight are factors in making and keeping a home sanitary.

The principles of sanitation are the same whether practiced by an individual, a home or a community, and if sanitary rules are followed by the individual, the home and the community, much unnecessary illness, suffering and many premature deaths will be avoided.

Someone has wisely said that, "The individual must pay for the sins of the community, just as surely as the community pays for the sins of the individual".