Pests in the kitchen or food storage areas can be a nuisance. Grains, cereals, pasta, nuts, dried fruit and some spices are subject to infestation by saw-toothed grain beetles, flour beetles, larder beetles and Indian meal moths. Often these insects invade the food at the warehouse and grocery stores, and once inside the home they can easily thrive and spread to other areas.

Meal moths, grain beetles and flour beetles are most often found around flour and grain products. Grain and flour beetles are very small and often require a microscope for positive identification. Meal moths are small with banded grey and brown wings. The larvae are white with dark heads and will often spin webbing around the grain they are feeding on. Larder beetles feed on a variety of food products but will be most often found around protein sources such as pet foods. The adult is approximately ½ inch long with a banded coloration. The larvae is easily identified because of its extremely hairy body. Your local Cooperative Extension Service office can assist you in identifying which pest you have.

**Treatment**
An Integrated Pest Management (IPM) system using various methods is useful in controlling these insects.

In case of infestation, the source of the insects must be removed. Heavily infested food should be discarded. If the infestation is light, packaged foods such as cereals and whole grains can be heated in the oven at 140°F for 30 minutes. Spread the food in shallow pans so that the heat can penetrate easily. Lightly infested dried fruit can be placed in a cheesecloth bag and dipped in boiling water for 6 seconds. Then drain and dry the fruit very thoroughly. Remove dead insect parts.

Another method is to freeze the infested food in plastic bags at 0°F for three to four days to destroy insects and eggs. Before storing the food again, check for visible signs of live insects. Caution should be used when considering using food that has been slightly infested since some individuals may be allergic to insect parts such as hairs.

One source of infestation that is often overlooked is the area where pet food is stored. Spillage is common and insects are attracted to these products. Store dry pet food in a garbage can type container.

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*Note: For purposes of identification, the illustrations are larger than life size. The I–shaped reference bars beside the illustrations represent the actual size of these pantry pests.*
Cupboards should be thoroughly cleaned if there has been insect infestation. A vacuum cleaner should be used to get the food particles out of cracks and behind shelves. It also will pick up the eggs, which are often very small. Also vacuum behind stoves, refrigerators and other appliances. Don’t forget the toaster! Following vacuuming, thoroughly wash all surfaces with soapy water, let dry and vacuum again. Empty vacuum cleaner bag to prevent insect return.

If all previous methods fail repeatedly, the shelves can be treated with an approved and registered insecticide after washing them. Insecticides formulated for household use can usually be found at department stores or food markets. Look for labels specifying the insects that have been observed in your kitchen and pantry and specifying use in the kitchen. Before buying any insecticide, read the label carefully and follow the directions. Remove all utensils and food. Spray lightly. When the spray dries, cover the shelves with clean paper or foil before placing food or utensils back in the cupboard. Follow all precautions for protecting pets, children and household items.

Prevention

To prevent future insect problems, all packages of dried food should be examined in the store for breakage or insects. In the home, all uninfested or heat-sterilized dry food should be stored in clean metal, glass or hard plastic containers that have tight fitting lids. These should be stored in a clean, cool, dry area off the floor. Storage areas should be kept clean and free of spilled food and food particles which attract insects.

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