House dust mite (D. Farinae) is a microscopic creature not visible to the naked eye. Mites thrive and multiply in warm, humid conditions of the home. These bugs do not bite or transmit disease; they feed off scales and dander shed by humans. They cause allergy in a sensitive person when their scales, fecal particles (each mite makes about 20 per day), and even the disintegrating body parts of dead mites become airborne and inhaled.

When a sleeping person moves on the mattress, the mattress give out a cloud of these fine particles (about 10 u in size). The mite’s life cycle from egg to adult is about 30 days, and each egg-laying female can increase the population by 25 to 30 every 3 weeks. In the U.S., live mite numbers peak in July and August, and allergens persist at high numbers through December. Because the airborne particles cause allergy, the worst symptoms are experienced in the fall months when the home is closed and ventilation is restricted. It is also possible that mites die in the fall in large numbers, disintegrate, and their body parts give a saturated exposure to the allergic patient.

Mite are inactive and least populous in April and May. Mites are found all over the world. The European mite is somewhat different but behaves the same way.

**Recommended Control Measures**

Since mites feed on organic matter, anything made of animal skin should be removed from the bedroom (feather pillow, feather bed, wool blankets, down pillows and comforters, silk filled bedding, sheep skins, etc.)

Pillows, mattress, and box springs should be encased in plastic or in a vinyl barrier bag (check local Sears or JC Penny), and the zipper sealed with a tape. If the mattress is too old, discard it and buy a new one. Waterbeds are preferable but can get moldy if not cared for properly.

Choose bedding made of Dacron or other washable synthetic material. Wash all pillows (if washable), bed sheets, blankets, and bedspreads regularly once every two weeks. All pillows and mattresses could be frozen in winter exterior at subzero temp. or exposed to hot afternoon sun for hours to kill the mites, and then beat with a stick to let out the particulate matter. If bunk beds are used, the allergic child should sleep on the upper bed.

Carpets and/or the padding underneath the carpet can become a nesting ground for the mites. If the carpet is old and wearing, the carpet could be badly infested with mites, especially in shag and plush carpets. It is best to remove them and replace with linoleum, hardwood, or tile flooring. They are easier to clean. Carpets, furniture, and upholstery should be regularly vacuumed. The allergic person’s bedroom should be minimally furnished.

Since humidity is such an important requirement for mite survival, it should be controlled to no more than 50% and no less than 30% for comfort. Set a humidity gauge on the wall. If you house is a high humidity one, use a dehumidifier and temperature effectively in warmer months. After showers, turn the exhaust fan on to left the moisture out, especially if bedroom is adjacent.

A mite killer power (Acarosan) is now available for application to the carpet; but mites can repopulate in six months to one year in control measures are not taken routinely.

House dust mite is a potent anitgen that can enter the system not only via breathing but also through skin contact; it can trigger severe eczema and asthma. It is an important initiator of asthma in children which, once established, may not necessary be reversed for years. This is why clean-up and prevention is so important.

House dust mite- related to chiggers and ticks- is about 1/3 of a mm in length and barely visible. It is a creature with eight hairy legs, no eyes, a fearsome jaw, and a tough shell. Its tine scale and fecal pellets become airborne and cause allergy to humans when inhaled. They feed on human ski flakes and other organic matter like feather, wool, or down particles. An average used mattress may have 100,000 to 10 million mites in it.