Eczema is an inflammatory skin disease that looks red, swollen and bumpy, and then becomes dry and flakey. It feels hot, sore and itchy.

Eczema can be most easily divided into two main groups due to:
- Internal constitutional factors: atopic, seborrhoeic, discoid, and venous.
- External contact: allergic, irritant, photo-reaction.

Usually after a burn or injury an inflammatory reaction occurs in the skin to minimise infection and heal wounds. This mechanism is activated in eczema resulting in an itchy sore rash. Repeated scratching makes the skin thickened and lined. This damages the skin surface, worsening the eczema and preventing healing.

Also skin cells are held close together by a special greasy glue made of a mixture of lipids. The production of these lipids can be deficient in some kinds of eczema and are removed by detergents and soaps. This results in the separation and shriveling of the cells and thus are shed more easily, which reduces the thickness of the barrier layer making the skin prone to dryness, cracking making eczema worse.

The inflammatory process in eczema affects both the epidermis and underlying dermis. In the epidermis, the keratinocytes (skin cells) become bloated and swollen, making them pull apart from one another. The epidermis becomes like a waterlogged sponge, which makes it feel swollen and raised, and the excess fluid can collect into tiny blisters. Chemicals called ‘proteases’ are activated, and these dissolve the "glue" that holds the keratinocytes of the outer skin layers together. This makes them shed more easily, causing dryness and increased skin flaking. When the important vital outer layers are lost, the skin is no longer such an effective barrier and tiny surface cracks develop allowing moisture to escape and infections to enter. The increased blood flow in the dermis in eczema causes signs of redness (erythema) and swelling, and makes the skin feel hot. Inflammatory chemicals in the skin act on the nerve endings to cause the uncomfortable, prickly itch (pruritis) and urge to scratch that is one the most distressing symptoms of eczema. (Dr. Sara Wakelin, 2005).

…. Although atopic eczema sufferers are more prone to having immediate food allergies, it doesn’t necessarily follow that the food allergy is the cause of their eczema. However, studies investigating the association between food allergy and eczema have found that about one-third of babies and young children with moderate or severe eczema also have an immediate food allergy. In these children avoiding the offending foods sometimes helps the eczema.” (Dr. Sara Wakelin, 2005).
Atopic eczema:
Is a chronic pruritic inflammation of the epidermis and dermis, often associated with personal and family history of asthma, allergic rhinitis, conjunctivitis or atopic eczema.

What is atopy?
Defines an inherited tendency present in 15 - 25% of the population, to develop one or more of the following disorders: asthma, allergic rhinitis, conjunctivitis or atopic eczema.

This disorder is characterized by the production of high levels of circulating IgE antibodies disturbing the immune function.

About 12 - 15% of infants are affected. It usually starts within the first 6 months of life, and by 1 year, 60% of those likely to develop it will have done so. Two-thirds have a family history of atopy.

Classically it affects the face, knee and elbow flexures.