Across the membrane into the blood

However, once toxins do start to accumulate in the blood, then a whole new array of immune elements comes into play. As the situation deteriorates with toxins leaking back across the membranes of our eliminatory systems (going from outside to inside) entering the blood supply, microbial elements may also traverse with them.

We need to remind ourselves that there are many microbes normally present on these outer membranes that have their various functions as described previously and if these outer membranes break down then microbes as well as toxins may now enter your blood. Initially the smaller microbes will leak across the membranes first; therefore viruses will cross far more readily than the larger bacteria cells, (viruses being much smaller than bacteria). We also know that your cells will produce viruses when poisoned, and therefore viruses can accumulate internally as a result of blood poisoning.

Viral illnesses, such as; measles, rubella and chicken pox, culminating in the typical viral rash, is the end result of the elimination of toxins and cell debris across the membranes of the body including the skin. The viral particles are just one of the components of cell debris. As such theses viral illnesses are indicative of milder blood toxicity and less membrane permeability than that of bacterial septicaemia, wherein bacteria, which are much larger than viruses have managed to traverse the outer membranes of the body.

The Rash

As a result of this generalised inflammatory response and blood immune activity by the white blood cells; destruction and elimination of blood toxins, cell debris and microbes, then the resolution of this internal blood toxicity would lead to the successful elimination of toxins and cell debris (viruses).

Elimination out of the blood, back across the membranes of the body to the outside, often results in a skin **rash**. The rash is in fact the visible process of elimination through the skin; because the blood has access to the external skin, as well as the external environments provided by the membranes of the lungs, urinary and digestive tracts, any part of this skin and membrane system can be the site used to eliminate toxins and cell debris. Once again, symptoms of phlegm, coughing, sneezing, nasal discharge, and less occasionally vomiting and diarrhoea may accompany the rash.

The rash, even within an orthodox context is known to be a vital component of the immune response and is termed viral shedding. The Lancet Jan 5th 1985 reports on an orthodox study conducted in Holland, investigating the phenomenon of measles virus infection **without** the appearance of typical measles rash.

In the patients studied, for those with antibodies but NO history of measles rash by adulthood, (average age in the study was 38 years), there was shown to be an

increased incidence of immunoreactive diseases, sebaceous skin diseases, degenerative diseases of bone and cartilage, and certain tumours.

The report concludes that, at the time of infection, it may be dangerous to interfere with the immune response by administering a passive immunisation to suppress the rash. It also states…

> ***"The absence of a rash may imply that intracellular virus (poisons) escapes neutralisation during the acute infection and this, in turn, might give rise to the development of diseases subsequently".***
>
> **Lancet Jan 5th 1985**

The rash would therefore appear to be vitally important, indeed with regard to the rest of the blood immune response the Lancet report goes on to state that further studies in children with agammaglobulinaemia i.e. **children unable to produce antibodies**, find that they are able to produce a rash, overcome the illness and develop immunity just as other children. Whereas those with impaired cellular immunity (unable to produce sufficient leukocyte responses) are more likely to develop complications such as pneumonia and possibly die.

It is interesting to note in homeopathy and naturopathy that not only is the rash an important symptom in the resolution of blood toxicity illnesses, such as measles, but also of equal importance is the pattern of the appearance and disappearance of the rash, i.e. the direction of the movement of the rash. Essentially, 'if' the symptoms are curative leading to resolution, then the rash starts higher up the body and moves its way down, finally disappearing from the lowest parts of the legs. It has similarly been documented in homeopathic literature that if in fact the rash moves from down to up, the opposite way, then the illness is not resolving and could therefore lead to more internal problems (or if fortunate, a recurrence of the rash).

The appearance of the rash in this generalised inflammatory response is caused by the blood vessels at the surface of the skin dilating at points causing the red spots, and the membrane of the blood vessels and skin, becoming more permeable (more leaky) allowing toxins and viruses out. The red blood cells and most other blood components are still confined to the blood vessels; only toxins, viruses and the flexible white blood cells can get out.

Note this is distinctly different from the severe toxaemia found in cases of septicaemia, where there is extreme blood toxicity often involving the presence of bacteria. At the site of the rash the blood vessel walls break down and there is blood loss under the surface of the skin giving the appearance of the septicaemic rash. This is not an eliminatory rash; the patient is effectively bleeding under the skin as a result of extreme poisoning, the blood is not contained within the blood vessels, it is a non-blanching rash and therefore the classic test of pressing a glass on the skin shows that the rash does not disappear. Generalised septicaemia can only happen under conditions of extreme blood poisoning and severe immune breakdown, once you understand the pattern and purpose of disease symptoms it is possible to predict the circumstances that lead to this scenario and it can therefore be effectively avoided.

The resolution of blood toxicity as described in the generalised inflammatory reaction in for example measles, results in the successful **elimination** of the toxins from the blood and internal systems. Remember that in our example of toxicity in the digestive tract, the build up of toxins enabled some to leak into the blood system across the stomach membrane. During the curative inflammatory response that followed there would have been:

- An increase in permeability in both the **blood vessel walls** and the **membranes of the digestive tract**, (more porous, with larger spaces/holes) to allow an active elimination of white blood cells, toxins and microbes back out across the membranes of the digestive tract.
- During this time there would have been a decrease in appetite and digestive function, so that food elements and other toxins are not able to pass across the membrane to the blood whilst the body is eliminating toxins in the opposite direction back across the membrane from the blood.

It is significant to realise that after the successful elimination of these toxins, cell debris and microbes, normal function resumes and as such **the membranes reduce their permeability once again**, i.e. the spaces within the membranes, that have previously allowed the toxins and white blood cells to travel out, reduce back to normal.

Therefore it is also possible to see how the membrane adapts and as with all of our learning processes, we know that **if there is resolution and learning** culminating in a reduced susceptibility to disease, then the individual (and therefore the biological system) is effectively stronger. If the individual has not resolved the illness then they will be left with chronic symptoms (persistent low level symptoms) and will be weaker i.e. be more susceptible to disease.

It therefore follows that the membrane itself, rather than just going back to normal (as it was before) actually becomes stronger after a **successful** immune response. The individual would in fact be far less susceptible to toxins entering the system; consequently ‘immunity’ as such, is much more general and corresponds to the resistance to a whole host of toxins and associated viral elements entering the body.

However, if the response has been **unsuccessful** - culminating in chronic disease - the membrane does not go back to normal, but in fact **remains slightly permeable**, thus persistently allowing small amounts of toxins in, and in fact the individual is left more susceptible to disease.

To summarise:

In order to successfully produce an eliminatory skin rash the body needs to have experienced a build up of toxins internally within the blood, which are broken down and engulfed by white blood cells, resulting in the process of elimination through the skin, culminating in the rash.

This is a process that needs to be learnt and as such is part of the immune development of the individual which normally occurs during childhood.

Childhood development in relation to immune function

At birth children do not have a fully functional immune system, for example they are unable to produce a generalised inflammatory response with fever until some time after birth, and this has been estimated as taking three months but of course depends on the individual.

The membranes of the digestive, urinary, respiratory tracts and skin are more permeable than in adulthood, allowing in more potential poisons. The main detoxification organ, the liver, has not developed the necessary enzymes and metabolic processes that enable one to detoxify toxins. The Lymphatic system and therefore T-cells and B-cells are similarly under developed, along with other immune cells.

It is estimated that 80% of the immune function is in the digestive system; in fact there is considerable overlap between immune function and digestive function. Enzymes are capable of breaking down both toxins and large food substances to smaller easily absorbed molecules, with the digestive tract membrane having the ability to keep out toxins and larger food substances but able to selectively absorb smaller nutrients.

In our example of blood toxicity; with the successful elimination of blood toxins and microbes in a child (the first illnesses of childhood, measles, rubella, chickenpox etc) the body has learnt an immune process that it has not been able to do before. The immune cells have developed memory and the membranes themselves have become stronger and less porous. The role of the membranes has often been undervalued in the portrayal of immunity and yet they provide the first lines of defence to our external environment.

Classically ‘immune memory’ was attributed to the presence of antibodies, however we now know that antibodies are not always present after successful immune reactions, we also know that other leukocytes have memory capabilities, the membrane itself with hormone receptor sites, selective channels and selective absorption also has memory. It is likely, given the nature of the human body and immune function that almost every element has memory and learning capability.

What happens if the body isn’t able to eliminate toxins via the skin and therefore unable to produce a rash, or if in fact the rash doesn’t fully resolve the internal toxicity?

Unresolved Blood Toxicity

The significance of immunity as a learning process shall become even more apparent when we consider the consequences of failed immune responses. If the

elimination of blood toxins, cell debris and viral particles has been unsuccessful, you would have a condition akin to a ‘post-viral syndrome’. A syndrome where the problem of blood toxicity has been unresolved, i.e. the toxins, cell debris and viral particles remain within the blood system. From what we know of immune learning and **unresolved** issues, we know that you become **more** susceptible and therefore sensitised to a problem, if resolution has been unsuccessful.

Reminding ourselves of the consequences of **unresolved** acute disease, we are aware that the intense and short-lived symptoms of acute illness leads to less intense but more persistent symptoms of the chronic illness, we can therefore predict the symptom scenario that an unresolved acute will lead to. An unresolved acute inflammatory reaction would lead to persisting symptoms of low-intensity inflammation in the system.

- The acute symptoms; increased blood supply to the membranes, increased permeability in both the blood vessel walls and the membranes of the digestive tract, (more porous, with larger spaces/holes), accompanied by a decrease in - appetite, digestive function, and physical function.

- If chronic we see persistent low intensity acute symptoms; an inability to maintain body temperature, a lack of vital heat - feeling chilly, low physical energy levels, poor appetite and persistently leaky membranes of the digestive tract.

Significantly, with unresolved blood toxicity the membrane is persistently ‘leaky’, you are now more susceptible to toxins entering your system, in addition to still having the initial internal toxins that have not been eliminated, and you are now **sensitised** to those toxins, **not immune** to them.

Persistent membrane permeability of the digestive tract would allow more toxins into the blood system and in fact certain food elements would gain access to the blood, before they have been fully broken down. These would overburden the detoxifying capacity of the liver and present an immune challenge in the blood. These food elements and toxins would overload immune cell activity in the blood and eventually as more elements enter the blood system, the failure of the cellular response to keep up would lead to the production of antibodies to these particles, as they try to alert the clean-up cells to eliminate these toxic elements.

With persistent membrane permeability we are now starting to develop food sensitivities and as we produce antibodies to our food, we see the development of food allergies. There will be a persisting low level elimination of internal toxins onto the outer membranes of the skin and lungs and we therefore see food sensitivities expressed as chronic skin reactions and chronic lung conditions.

This can also be perceived from the perspective of observable acute symptoms becoming chronic; therefore in the case of an unresolved acute rash this could then lead to a persistent (chronic) rash for example leading to eczema. In this state you are not able to eliminate using an acute (quick and intense) eliminative rash, i.e. you are unable to have measles not as a result of good health but due to poor health.

If the symptoms of eczema (the chronic rash) are further suppressed using, for example a topical steroid, (which is designed to suppress the immune functions of the body), this may offer relief, but does not address the cause of the problem and in fact often leads to a deeper chronic, which we know often leads to asthma, i.e. affecting the lung skin which is considered to be a deeper skin.