FISH AND SEAFOOD

Fish/Seafood allergy means an adverse reaction to proteins found in different marine species.

The immune system of sensitised/allergic individuals produces IgE antibodies, which causes release of histamine and harmful substances when the food is eaten.

FISH

- Globally fish and seafood play an important role in human nutrition.
- The move to healthier eating habits and the substitution of meat with seafood in the diet has meant that more fish being ingested.
- In Southern Africa there are 2 000 different species of fish.

SEAFOOD is the broad term used to describe 2 groups of marine animals:

- **Crustaceans**  shrimp, rock lobster, prawns.
- **Molluscs**  mussels, oysters, squid, calamari and octopus.

  If you are allergic to fish, you are not necessarily allergic to seafood.
  If you are allergic to crustaceans, you are not necessarily allergic to molluscs, and vice versa.

WHAT ARE THE SYMPTOMS OF FISH/SEAFOOD ALLERGY?

- Allergy to seafood /fish could result in almost any allergy symptoms and sign, but some are more common than others.
- Common symptoms include skin rashes/swelling, nausea/vomiting and breathing difficulty.
- Respiratory symptoms may occur in sensitive subjects following inhalation of fumes from the cooked or braaied fish
- Most symptoms develop within 2 hours after eating, smelling or handling fish.
- Severe allergy can cause life-threatening anaphylaxis and needs to be treated with adrenaline.
Fish/Seafood Allergy does not mean iodine allergy!

HOW COMMON IS SEAFOOD ALLERGY?
True seafood allergy is more common in adults than children, but is more likely to persist into adulthood, when present in a child.

OTHER ADVERSE REACTIONS TO FISH
- Sometimes it can be difficult to diagnose a patient with allergy to fish if other non-allergic reactions are involved e.g. caused by fish poisoning.

- **Scromboid Poisoning** occurs from the ingestion of spoiled fish, caused when fish is not properly refrigerated or when refrigeration is delayed. Fish species with brown meat are often involved such as yellowtail, tuna and mackerel. Allergy-like symptoms are usually experienced within 1-2 hours and include flushing, sweating, headache, nausea, vomiting, diarrhoea and hives/urticaria on the skin.

- **Ciguatera Fish Poisoning** occurs from reef fish in tropical and subtropical waters, which may be found north of the Natal Coast. Symptoms include tingling of the hands and feet, low heart rate and drop of blood pressure.

- Allergic reactions have been described in people eating fish contaminated with a small parasitic worm called Anisakis. These allergy-like symptoms are mostly reported after eating raw or undercooked fish, and are caused by an allergy to the parasite which is in the flesh of the fish. It is easily diagnosed by a simple blood test. In South Africa, Snoek is usually implicated.

HOW IS FISH ALLERGY DIAGNOSED?
- A precise and detailed history is very important in allergy to seafood to indicate if a reaction is of an allergic or a toxic nature.
- The clinical evaluation should be supported by tests performed on a blood sample for the suspected fish/seafood.
TREATMENT PLANS

- Avoid any possible direct or indirect exposure to the offending fish including handling or inhaling cooking vapours.
- Take care when eating out, as your meal may be contaminated with fish (e.g. French fries and fish prepared in the same oil).
- Wear a Medic Alert bracelet and carry an injectable adrenalin syringe if you are very allergic.