

Moluscs and Shellfish

Shellfish have a hinged two-part shell and include clams, mussels, oysters and scallops

Molluscan Shellfish

- The molluscan shellfish relevant in human diet are gastropods (including abalones, limpets, land and marine snails, whelks), bivalves (including oysters, mussels, scallops) and cephalopods (including squids, octopuses). Increasingly, molluscan shellfish are recognized as important food allergens and have recently been added to the EU list for mandatory labelling of allergens. The prevalence of molluscan shellfish allergy is largely unknown but may parallel consumption patterns, with higher frequency in areas of frequent consumption.
- The major allergen of molluscan shellfish is tropomyosin and thus individuals developing allergic reactions to one mollusc species also often react to other species as well. Due to the similarity between invertebrate tropomyosin allergens molluscan shellfish allergic individuals may also react to crustacean shellfish and non-dietary invertebrates (e.g. house dust mite, cockroach).
- Molluscan shellfish allergy triggers symptoms ranging from mild local reactions in the oral cavity (oral allergy syndrome) to severe life threatening systemic reactions. Gastrointestinal and respiratory symptoms were occasionally also reported. Shellfish allergens retain their allergenic potential even after heating.

Crustaceans

- Crustaceans are aquatic animals that have jointed legs, a hard shell and no backbone such as crab, crayfish, lobster, prawns and shrimp

Other names for crustacean

- Crab, Crayfish (crawfish, écrivisse), Lobster (langouste, langoustine, coral, tomalley), Prawns, Shrimp (crevette)

Crustacean Shellfish

- The group of crustacean shellfish comprises a range of members of which shrimps, prawns, crabs and lobsters are most relevant to human diet. They contribute considerably to human nutrition and the world economy.
- Allergy to crustacean shellfish seems to predominantly affect older children and adults, especially in regions with a high rate of consumption. Crustacean shellfish allergic individuals regularly react to various different types of crustacean shellfish but can also react to molluscan shellfish and edible land snails, caused by the major shellfish allergen tropomyosin. The widespread occurrence of tropomyosin in other invertebrate species can cause crustacean allergic individuals to also react to non-dietary invertebrates (e.g. house dust mite, cockroach).
- Symptoms of crustacean shellfish allergy range from mild local reactions in the oral cavity (oral allergy syndrome) to severe life threatening systemic reactions. Occasionally gastrointestinal and respiratory symptoms occur. Occupational exposure to crustacean shellfish aerosols during processing and food preparation can be associated with rhinitis and conjunctivitis³⁴.
- Since shellfish retains its allergenic potential even after heating, avoidance of all forms of shellfish is essential. Crustacean shellfish may be present in some processed instant foods (e.g. pizza, garnishes, sauces, salad dressings).
- Crustacean shellfish is included in the Big-8 and the Codex Alimentarius allergen labeling recommendations for labelling of pre-packaged foods.

