

I. Read the following text then choose the option that best answers each of the questions.

Allergic to eating Lucy Smith was strolling through Canberra last July. Within moments she couldn't stand, gripped by pain so severe she feared she would pass out – the first sign of paralysing diarrhoea. This dramatic episode turned out to be caused by a newly-acquired food allergy – to red meat. Food allergies affect one per cent of the adult population of Australia. Most don't hit with the same force as Lucy's, but the physical and mental impact can nonetheless turn a person's life upside down, and may even be life-threatening. Lucy deduced that she was allergic to red meat, one of the less common allergenic foodstuffs. Only after several further attacks of varying severity, was her suspicion eventually confirmed by a specialist.

An allergy, according to immunologists, is the immune system over-reacting to a substance that would ordinarily be considered benign. However, the term 'allergy' is used more loosely by the general public. People say they are allergic to a substance because it brings about some kind of adverse reaction in their bodies, some of which can be severe and may resemble true allergic reactions, but unless the immune system itself is directly involved, experts categorise it as 'intolerance'. Constant sneezing, itchy eyes or throat and inner ears, asthma, rashes, and diarrhoea can all be signs of food allergies. Intolerance can bring on similar warning signs as well as things such as headaches, bloating, and general lethargy. Over time, some allergy sufferers lose weight because there are so few foods they can eat. Of course, the social implications are huge too – eating is a major social event.

To diagnose a food allergy, immunologists use a 'skin-prick test' in which a drop of a commercially extracted allergen is placed on the skin and the first couple of skin layers are pricked with a lancet. If a person is allergic, the immune system is stimulated sufficiently to produce a mosquito bite-like bump within fifteen minutes. This testing method is, however, somewhat unreliable in detecting intolerances, because, while not fully understood, they operate via a different biological mechanism possibly involving chemicals in food irritating nerve endings in the body. They are generally diagnosed by following an exclusion diet in which suspect foods are gradually reintroduced and their effects monitored.

According to paediatric immunology specialist Dr Velencia Soutter, around six to eight per cent of babies are affected by allergy. While most children will outgrow them, some actually grow into them. The mechanisms that provoke an allergy remain a grey area. Soutter says: 'It's like throwing a match into a fireworks factory. Hit the right place and you set off a chain reaction. Miss it and the match just fizzles out. That difference between lighting up or fizzling out isn't well understood.'

1. The case of Lucy Smith highlights the fact that

- (a) food allergies may be difficult to diagnose in certain people.
- (b) are relatively rare in the adult population.
- (c) can cause debilitating symptoms.
- (d) often require urgent treatment.

2. In the second paragraph, what point is made about food intolerances?

- (a) Scientists continue to disagree about their root causes.
- (b) The symptoms are indistinguishable from those of allergies.
- (c) They can have an unpredictable impact on the person affected.
- (d) The distinction between them and allergies is not widely appreciated.

3. The phrase 'via a different biological mechanism' in the third paragraph explains

- (a) the way the skin-prick test works in diagnosing food intolerances.
- (b) how the presence of food impurities impacts on the skin-prick test.
- (c) why the skin-prick test may not accurately diagnose food intolerance.
- (d) how food allergies are triggered by substances used in the skin-prick test.

4. Dr Soutter uses the image of a fireworks factory to illustrate that

- (a) the factors triggering an allergic reaction still remain unclear.
- (b) allergic attacks can occur suddenly any time in a person's life.
- (c) it's difficult to foresee which family member an allergy will affect.
- (d) the identification of a food allergy is basically a matter of chance.