



THINKING SKILLS

Paper 4 Applied Reasoning

1 hour 45 minutes

You will need: Answer booklet (enclosed)

- Answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

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[Turn over

Questions 1 and 2 refer to Document 1.

- 1 (a) State the main conclusion of the argument. [1]
- (b) Identify **three** intermediate conclusions in paragraphs 3 to 4. [3]
- (c) Analyse the structure of the reasoning in paragraph 1. [3]
- (d) Identify an unstated assumption required by the reasoning in paragraph 2. [1]

- 2 (a) Identify and explain **three** flaws and/or weaknesses in the reasoning in paragraphs 3 to 5. [6]
- (b) Assess the extent to which paragraph 6 supports the argument as a whole. [3]

3 *Question 3 refers to Document 4.*

- (a) 'Supermarkets discount unhealthy food more than healthy food.'

Identify **three** weaknesses in the support given by the table in Document 4A to this claim. [3]

- (b) 'Mexican tax laws are effective in reducing sugar intake.'

Identify **three** weaknesses in the support given by the graph in Document 4B to this claim. [3]

4 *You are advised to spend some time planning your answer before you begin to write it.*

'Governments should take action to reduce consumption of unhealthy food.'

Construct a reasoned argument to support **or** challenge this claim. In your answer you should make critical use of the documents provided. [27]

DOCUMENT 1

- 1 So-called 'lifestyle diseases', such as heart disease, are the biggest avoidable killers in the modern world. These diseases are associated with some unavoidable factors, like age or genetic predisposition. Nevertheless, one of the biggest avoidable factors is the consumption of high levels of what is often described as 'junk food'. So we should do what we can to reduce that.
- 2 Banning junk food entirely would probably be blocked by the junk food industry and some libertarian politicians. However, these vested-interest groups would be less able to block a small-scale intervention in the relationship between junk food producers and consumers. We should ban the advertising of junk food.
- 3 Junk food is undoubtedly bad for our health. Junk food consumption is clearly linked to heart disease: a famous study by the University of Minnesota, conducted in Singapore, showed that eating fast food once a week increases the risk of heart disease by 20%, eating two or three fast food meals a week increases the risk by 50% and four times a week causes a staggering 80% increase in the likelihood of developing heart disease. The people in the study who consumed the most fast food were young adults.
- 4 Food companies spend billions on advertising their products – some estimates suggest as much as \$4 billion a year in the US alone. If advertising did not work, they would not spend all of this money. It follows that junk food advertising increases the consumption of junk food. Smoking levels fell after they banned tobacco advertising, so a ban on junk food advertising would significantly decrease junk food consumption.
- 5 A majority of healthcare professionals, including doctors and public health scientists, advocate a ban on junk food advertising. There is also support for such measures from parents: a recent poll conducted in several countries across three continents showed that 62% of parents agreed that all junk food advertising aimed at children should be banned. So public opinion is on the side of legislation against junk food advertising.
- 6 Finally, it would be relatively easy to introduce a ban on advertising, as we already have advertising restrictions in place for tobacco and alcohol products. We all know what we mean by junk food and advertising is such a visible phenomenon that any infringements would be easy to detect.

DOCUMENT 2

Banning junk food for children could backfire

A colleague of mine used to have a 'no fizzy drinks' policy in her house. Her six-year-old had never seemed bothered about it until she went out for lunch with a friend's family and came home enthusing about the can of cola she had just had. From then on, fizzy drinks and other forbidden treats became the focus of much of her conversation and she would actively seek out foods that she was 'not allowed to eat', even overeating when the opportunity presented itself. Parenting became a whole lot more difficult. Banning junk food can have unintended consequences.

Dietician Lindsay Wade advises it is not a good idea to present all junk food as bad. She suggests parents explain that junk food has no health benefits, so it shouldn't be eaten frequently. If you restrict something, or refer to it as 'bad', it can become more alluring. Research shows that many children, although by no means all, can end up overindulging if they do get a taste for something forbidden. It is not the case that banning something means that your child will choose a healthy alternative. Actually, they become more likely to opt for unhealthy foods if given the chance – for example when they're at a friend's house.

Children who don't want to disappoint their parents might develop negative emotions around eating the banned food. Labelling certain foods as 'bad' also has the potential to scare children. A child that learns that sugar is 'bad' might begin to narrow the range of food they will eat, refusing to try new foods, even if parents tell them it is healthy.

In recent years, schools have begun to introduce restrictions around junk food: removing vending machines, offering only 'healthy' alternatives in school cafeterias and removing salt from tables. In June 2017, a study by the University of New Brunswick showed that, for each year of a school junk food ban, the average child was 200g lighter than a child at another school. So obvious benefits are not large. Furthermore, such measures are often met with parental resistance and many parents complain when schools confiscate banned items from packed lunches. This can lead to a breakdown in school–parent relationships.

A much more productive approach is for schools to teach children about food and health, for example how to decipher nutrition labels. Parents can take a similar approach at home. 'It is important for children to understand that an occasional treat is OK', says Wade. Parents should provide guidance around junk food, allowing it in moderation. Rather than forbidding certain foods, parents should be modelling moderation. This might be tricky for parents who like junk food, but if your children know you like fizzy drinks, but you only drink them once a week, that can teach them a really positive lesson about willpower.

DOCUMENT 3

Mexico bans junk food ads on TV

The Mexican government has announced that TV advertising for high-calorie food and soft drinks will be banned with immediate effect on terrestrial and cable TV between 14:30 and 19:30 on weekdays and between 07:30 and 19:30 at weekends, as part of its campaign against obesity. Restrictions will also be imposed on similar ads shown at the cinema.

The Health Ministry claims that the ban will reduce the number of TV commercials for soft drinks, confectionery and chocolates by 40%, allowing their replacement with ads for products that meet nutritional requirements.

This is one step further than most other countries. The UK, Norway and Quebec all have similar ad bans in children's television. However, such adverts can still appear in what is termed 'family programming'. So the junk food ads are still there in the shows that attract the biggest audiences. Banning junk food ads at certain times of day would close this loophole.

Mexico is keen to tackle the growing incidence of diabetes and heart disease amongst its citizens, who, at 163 litres per person per year, are the world's highest consumers of sugary drinks. Official figures suggest that 70% of adults and 30% of children in Mexico are either obese or overweight. Health experts estimate that the nation's weight problems cost the public health care system \$12 billion. Estimates about costs to the economy from work days lost to obesity-related ill health are also high.

In 2013, the Mexican government introduced taxes on high-calorie foods and drinks, as part of its obesity prevention strategy, and, like many other countries, is introducing mandatory labelling of the sugar, fat and saturated fat content on their food and drink products.

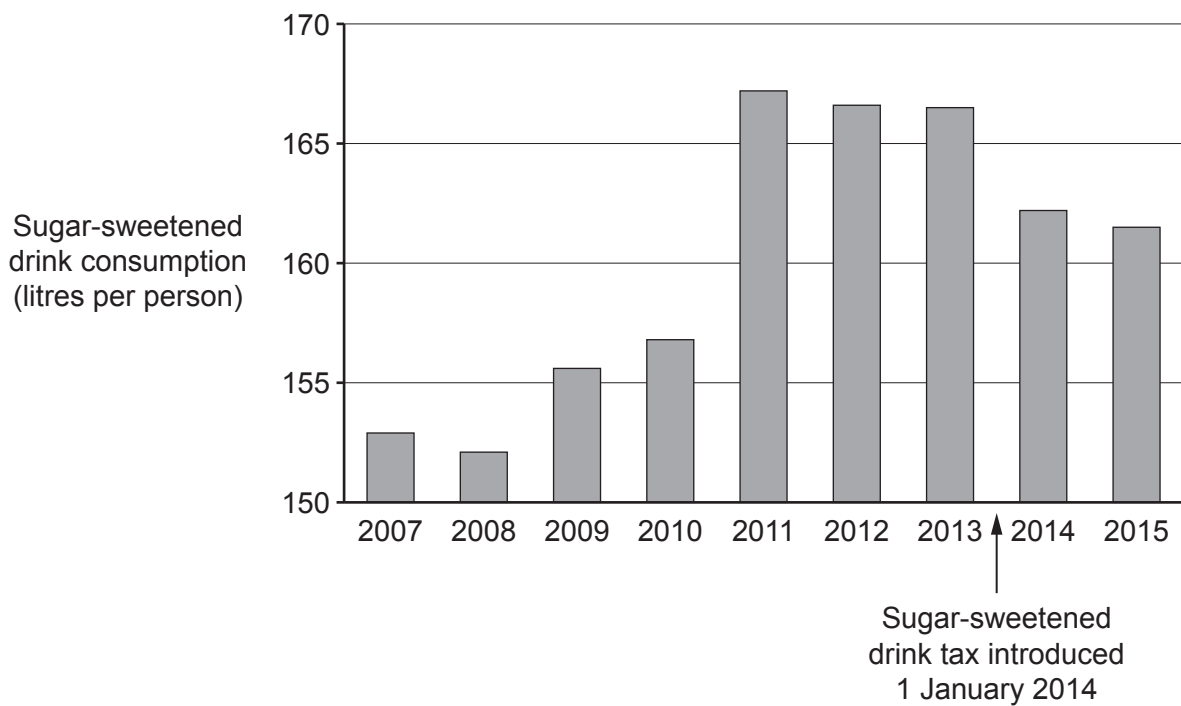
<i>Country</i>	<i>Overweight and obese adults (% with BMI* over 25)</i>	
	<i>1980</i>	<i>2008</i>
China	13	25
India	9	11
Japan	15	25
Mexico	37	68
South Africa	39	66
UK	39	64
US	45	71

* Body Mass Index – a common measure of weight in proportion to height

DOCUMENT 4A**Supermarkets discount unhealthy food more than healthy food**

<i>Food category</i>	<i>% of total promotions*</i>
Healthy	46
Unhealthy	54

*Data from a range of leading supermarkets, over a period of 12 months, where the food was offered at a lower price than normal

DOCUMENT 4B**Mexican tax laws are effective in reducing sugar intake**

DOCUMENT 5**A selection of comments from an internet discussion forum**

- A What does junk food even mean? If it is a certain level of salt, fat or sugar, where do you draw the line? Cheese has a lot of saturated fat and salt, but some would consider it healthy. It is impossible to regulate junk food fairly, so we should not even attempt it.
- B Individuals have a right to choose what they want to eat and, if they want to eat junk food, people have a right to sell it to them. It is a massive infringement of civil liberties to come between a man and his burger.
- C The government is considering introducing a tax on junk foods – \$3 on every kg of sugar and \$6 on every kg of salt. I would support this, as long as the money raised goes towards promoting health and wellbeing.
- D Junk food affects our brains. It slows down metabolism and makes us lazy. It's also addictive, which makes it hard to cut down if you already eat a lot of it.
- E These days, due to the changing nature of work, more people are doing desk jobs and following a sedentary lifestyle. With people exercising less, junk food becomes much more of an issue.
- F In moderation, so-called junk food is not unhealthy. It only becomes so if you eat large quantities. Some products that might meet the criteria for some definitions of junk food are even marketed as healthy snacks. We should not ban something that can be healthy.
- G People with certain health conditions need high-calorie foods. Any taxes or bans would unfairly discriminate against people like this.
- H Ice cream and cheese have high levels of calcium, which is needed for healthy bone development in children.
- I When kids get a taste of something forbidden, they can end up overindulging and binge-eating when they get the opportunity.
- J It's just so easy to go for the junk food option, even if you're trying to be healthy. Buying vegetables and cooking from scratch is very time consuming – and fresh ingredients are expensive.
- K The food industry has already reduced salt and sugar in foods – we should let them regulate their own products.
- L I run a small company and many of my staff are middle-aged. It costs the business a lot when people need time off work for healthcare issues. One of my best sales representatives had a heart attack in 2019 and was off work for 4 months.

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