

LANGUAGE STUDIES & RESEARCH

TEST-18

Appendicitis

PART A

TEXT 1

Appendicitis is acute inflammation of the appendix, the thin pouch attached to the large intestine on the right side of the abdomen. It is usually about the size of a finger.

The exact cause of appendicitis is not known. Some people think the appendix becomes obstructed during a bout of appendicitis. Others believe it is an obstruction that causes appendicitis. Regardless, the result is an obstruction of the appendiceal lumen, possibly by faeces, foreign body, or even worms.

There are no medically proven ways to prevent appendicitis and there is no known diet to prevent appendicitis. Many people treated for acute appendicitis may have had previous episodes of appendicitis that they did not seek treatment for.

Appendicitis can occur at any age, but is most common in children and young adults. In 2013, Australia's rate of appendicectomy was among the highest in the Organisation for Economic Co-operation and Development (OECD). Rates per 100,000 population were 194 in South Korea, 177 in Australia, 168 in Germany, 139 in New Zealand, 105 in Canada and 94 in the United Kingdom. Appendicectomy was the most common emergency surgery performed in public hospitals in 2014–15. In 2014– 15, approximately 30,000 appendicectomies were performed in public or private hospitals as a result of an emergency admission.

Symptoms and diagnosis of appendicitis

Appendicitis typically starts with a pain in the middle of the abdomen that may come and go. Within hours, the pain travels to the lower right-hand side, where the appendix is usually located, and becomes constant and severe.

Some people's appendix may be located in a slightly different part of their body, such as: the pelvis; behind the large intestine or around the small bowel. The pain



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may be worsened by pressing around the area, coughing, or walking. Other symptoms include: nausea and/or vomiting; anorexia; diarrhoea; pyrexia or a flushed face.

Diagnosing appendicitis can be tricky because the typical symptoms are only present in about half of all cases. Some people develop pain similar to appendicitis, but it's caused by something else, such as:

- Gastroenteritis;
- Severe irritable bowel syndrome;
- Constipation,
- Ectopic pregnancy
- A urine infection

History taking and abdominal examination to see if the pain gets worse when pressure is applied to the appendix area are usually sufficient to diagnose appendicitis.

Further tests may involve: a blood test to look for signs of infection; a pregnancy test for women; a urine test to rule out other conditions, such as a bladder infection; an ultrasound scan to see if the appendix is swollen or a computerised tomography (CT) scan.

TEXT 3

Managing appendicitis

Medical advice should be sought for ongoing abdominal pain, and if the pain suddenly gets worse, emergency transfer to hospital is required.

If appendicitis is strongly suspected, the appendix is surgically removed as an emergency, without full investigation rather than run the risk of it bursting. This means some people will have their appendix removed even though it's eventually found to be normal. This is called a negative appendicectomy. Surgery may be laparoscopic or open.



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An alternative to immediate surgery is the use of antibiotics to treat appendicitis. However, studies have looked into whether antibiotics could be an alternative to surgery. As yet there isn't enough clear evidence to suggest this is the case.

In some cases where a diagnosis is not certain and symptoms are not too severe, a doctor may recommend waiting up to 24 hours to see if symptoms improve, stay the same, or get worse.

Sometimes appendicitis can lead to the development of a lump on the appendix called an appendix mass. This lump, consisting of appendix and fatty tissue, is an attempt by the body to deal with the problem and heal itself. If an appendix mass is found during an examination, your doctors may decide it's not necessary to operate immediately. Instead, a course of antibiotics is given and an appendicectomy is performed a few weeks later, when the mass has settled.

Without surgery or antibiotics the mortality rate for appendicitis is 50%. With early surgery, the mortality rate is < 1%, and convalescence is normally rapid and complete. With complications such as rupture and development of an abscess or peritonitis and/or advanced age, the prognosis is worse: Repeat operations and a long convalescence may follow.

TEXT 4

Potential complications from appendicitis

The obstruction of the appendix can lead to distention, bacterial overgrowth, ischemia, and inflammation. If untreated, necrosis, gangrene, and perforation occur.

If the appendix perforates or bursts, it releases bacteria into other parts of the body. This can cause peritonitis if the infection spreads to the peritoneum, the thin layer of tissue that lines the inside of the abdomen. If peritonitis isn't treated immediately, it can cause long-term problems and may even be fatal.

Sometimes an abscess forms around a burst appendix. This is a painful collection of pus that occurs as a result of the body's attempt to fight the infection. It can also occur as a complication of surgery to remove the appendix in about 1 in 500 cases.



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Abscesses can sometimes be treated using antibiotics, but in the vast majority of cases the pus needs to be drained from the abscess.

Wound infection can occur after surgery. The risk of this is less for people who have a laparoscopic appendicectomy.

Questions 1-7

For each question, **1-7**, decide which text **(A, B, C or D)** the information comes from. You may use any letter more than once.

In which text can you find information about

Where the appendix is usually found? ______

2 The adverse situations a person may experience if they have appendicitis?

3 Appendicitis can be avoided? ______

4 An unnecessary appendicectomy? _____

5 The surgical approach the keeps infection risk low? _____

The way a persons body can try and manage appendicitis itself?

The prevalence of appendix removals in Australia? ______

Questions 8-14

Answer each of the questions, 8-14, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8 The number of people who would die from appendicitis without modern treatments?

9 How big is a healthy appendix in most people? _____



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10 Where does pain usually start if a person has appendicitis?

11 If an appendix ruptures, what condition could develop in the membrane lining of the tummy?

12 What drugs can be used instead of surgery if a person has appendicitis?

13 If an inflamed appendix is left alone it might burst and what other conditions might develop?

14 What is the appendix usually attached to? _____

Questions 15-20

Complete each of the sentences, 15-20, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

15 After a few hours of appendicitis developing, the ______ to the lower right-hand side of the abdomen.

16 An_____ can envelop a burst appendix

17 Some believe an appendix______ in an episode of appendicitis.

18 A doctor examines a patient's tummy to find out if the ______ when they press around the appendix

19 An accumulation of ______ can develop as the body tries to get rid of any infection.

20 It is not always easy to confirm a person has appendicitis because the ______ only show up about 50% of the time.



TEXT 1

Loneliness Is Harmful to Our Nation's Health

It has long been recognized that social support—through the availability of nutritious food, safe housing and job opportunities—positively influences mental and physical health. Studies have repeatedly shown that those with fewer social connections have the highest mortality rates, highlighting that social isolation can threaten health through lack of access to clinical care, social services or needed support. However, how the subjective sense of loneliness (experienced by many even while surrounded by others) is a threat to health, may be less intuitive. It is important to recognize that feelings of social cohesion, mutual trust and respect, within one's community and among different sections of society, are all crucial to well-being. Perhaps this is especially so at a time of great social polarization exacerbated by contentious politics and vitriolic TV news.

Question

- 1) What does the reader learn about loneliness in the following article?
 - a) a person's sentiments may be more important than objective factors
 - b) feelings of solitude are increasing in modern society
 - c) the government should provide more services in order to reduce social isolation

TEXT 2

Introduction to Recurrent Abdominal Pain

Recurrent abdominal pain (RAP) in children describes recurring abdominal pain without organic cause. It presents commonly in general practice and it causes a great deal of school absence and considerable anxiety. Most cases can be managed in primary care. Medication is not normally needed. The initial approach adopted by primary care doctors is crucial to successful management. It involves thorough history and examination skills, understanding and awareness of red flags which suggest organic pathology, and the knowledge and consulting style that offer a clear and empowering approach to patients, whilst avoiding unnecessary investigation.



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RAP is believed to be a functional gut-brain interaction disorder caused by altered feedback mechanisms between the gut and central pain pathways.

Question

- 2) The writer uses the words 'red flags' to indicate
 - a) an example of colour codes used in pathology diagnosis
 - b) a patient has a mental illness (an informal term used by healthcare workers)
 - c) symptoms which may point to a more serious medical condition

TEXT 3

Emotional Intelligence and Nursing

The concept of emotional intelligence (EI or EQ) emerged over 20 years ago and still applies today. Emotional intelligence is described as the ability to monitor or handle one's own emotions as well as the emotions of others. Emotional intelligence involves recognizing feelings, self-monitoring or awareness, how emotions impact relationships and how they can be managed. Studies have shown that there is a correlation between emotional intelligence and positive patient outcomes. This includes clinical outcomes, patient satisfaction and the ability to develop therapeutic relationships. Team performance and morale have also been found to be related to emotional intelligence, including positive conflict resolution rather than hostile environments or horizontal violence. Nursing retention, job satisfaction, and engagement have also been associated with emotional intelligence.

Question

- 3) Which of the following statements is not true?
 - a) there is a link between emotional intelligence and lower rates of recruitment
 - b) although beneficial for nursing staff, emotional intelligence has little effect on patients
 - c) emotional intelligence is a relatively new idea





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TEXT 4

Arsenic Trioxide Recommendations

Arsenic trioxide is recommended, within its marketing authorisation, as an option for inducing remission and consolidation in acute promyelocytic leukaemia in adults with untreated, low-to-intermediate risk disease and for patients with relapsed or refractory disease, after a retinoid and chemotherapy. People with untreated, low-to-intermediate risk acute promyelocytic leukaemia are given ATRA plus chemotherapy. Clinical trial evidence shows that arsenic trioxide plus ATRA is effective for untreated disease. Some assumptions in the model, such as the long-term effect of treatment, lead to the cost-effectiveness analyses being uncertain. Arsenic trioxide is already used to treat relapsed or refractory acute promyelocytic leukaemia. The clinical- and cost-effectiveness evidence for arsenic trioxide in relapsed or refractory disease is uncertain, because the clinical trial was small and did not compare arsenic trioxide with other treatments.

Question

- 4) What is inconclusive about the use of arsenic trioxide?
 - a) if it represents good value for money
 - b) if it can be used effectively with intermediate-risk leukaemia patients
 - c) if arsenic trioxide can be used with treatments other than ATRA therapy

TEXT 5

Who Should Not Be Immunised?

Immunisations are generally very safe and effective. The main reasons for a person not to have a vaccine is if they have had a severe allergic reaction to a previous dose of that vaccine or to an ingredient in the vaccine that was also present in a different vaccine. People who have had very severe allergic reactions to egg should not have the yellow fever or flu vaccines other than under specialist care as there may be small amounts of egg protein in these vaccines. Certain vaccines are not usually given to women who are pregnant. They may not be suitable for people who are immunosuppressed. If you are unwell with a high temperature (fever), vaccination is usually put off until you are well again.



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Question

- 5) Which of the following statements is not mentioned?
 - a) some vaccine components can cause an allergic reaction
 - b) expectant mothers may need to postpone a vaccination
 - c) some vaccines are developed from the yellow part of eggs

TEXT 6

New Drug Class Available for Eczema

The new drug, Eucrisa, is a topical ointment that contains a phosphodiesterase 4 enzyme inhibitor that helps reduce symptoms of itchiness and inflammation caused by atopic dermatitis. Atopic dermatitis (AD), also known as eczema, is a skin condition experienced in 10-12% of children and 0.9% of adults in the United States. Diagnosis almost always occurs in infancy and childhood. Pruritus is considered the hallmark symptom of AD, as there is no objective test or biomarker that is used for diagnosis. Other symptoms include dry skin and erythema. The most common spots for lesions to occur are inside the elbows and knees, and on the hands and feet. It also can present on the skin around the eyes, eyelids, eyebrows and lashes.

Question

- 6) What do we learn about pruritus from the following article?
 - a) pruritus is experienced by 0.9% of adults in the United States
 - b) pruritus has been superseded by the new treatment, Eucrisa
 - c) pruritus is the defining characteristic of atopic dermatitis



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PART C

TEXT 1

When it comes to summer skincare, most of us feel pretty clued-up. But according to Cancer Research UK, rates of skin cancer are on the rise. Yet, 9 out of 10 cases could be prevented by staying safe in the sun. We look at sun protection mistakes you might be making.

With a variety of products available all promising to keep us safer in the sunshine, it's no surprise that many of us believe sunscreen offers the best protection during the hot weather. However, we need to combine the use of this product with other forms of sun protection. "One of the biggest mistakes people make is to rely on sunscreen alone as their sole protection," says Emma Shields, senior health information officer at Cancer Research UK. "However, it's best to use sunscreen in combination with time in the shade when the sun is strong, wearing a hat, covering up and wearing sunglasses."

Many of us associate a golden glow with good health, but when it comes to suntanning, appearances can be deceptive. "There's no such thing as a safe tan. In fact, any change in skin colour is a sign of damage." Shields claims. Consultant dermatologist Dr Daniel Glass of The Dermatology Clinic in London adds "Often, people associate sun-kissed skin with good health, but in fact, UV exposure will account for over 75% of skin ageing. In addition, the extra sun exposure may increase the risk of skin cancer later in life."

So, we get a little burnt, but if we slap on some after-sun lotion, that will repair the skin, right? Well, no. According to Shields, whilst after-sun lotion products "might help to soothe the skin, they don't undo the damage." However, Shields is quick to reassure that skin damage caused by mild sunburn can usually be dealt with by the body's own healing processes. "Your body does have its own repair mechanisms that can fix sun damage," she explains.

When we expose vulnerable areas such as the tops of our ears or our nose, it may be tempting to opt for a total block product. However, whilst such a product may look highly protective and usually offers an impressive level of protection, the name is a little misleading. "There is no such thing as a total block, as no cream can prevent all UV rays," explains Dr Stephanie Munn, dermatology clinical lead at Bupa UK. However, sunblock does provide a good level of protection, when used effectively. " Sunblock is a physical sunscreen such as titanium oxide or zinc oxide which blocks





out the UVB rays by acting as a physical barrier, as opposed to sunscreen which absorbs UVA. Sunblocks are less cosmetically acceptable as they create a chalky layer on the skin but are better tolerated on sensitive skin so are preferable to children," adds Munn.

With the price of sunscreen often on the high side, it can be tempting to dig out last year's bottle and use it up before restocking. But using an out-of-date or badly stored product could mean that your skin isn't fully protected. "You should discard any sunscreen after it has been open for a year," agrees Munn. "Some sunscreens include an expiration date too - so make sure you discard any that go past this." In addition, that bottle of sunscreen you've left in the garden, might not offer the protection it once did. "Leaving your sunscreen in the heat can cause it to break down faster, making it less reliable," explains Munn. "You're putting your skin at risk, as you won't know what the SPF is. Once it's overheated, you won't be as protected so it's important to keep your sunscreen in the shade."

It can be tempting to think that darker skin, or skin that is already tanned, doesn't need protection. However, this is not the case. "Anyone can get sunburn, including dark-skinned people," explains Shields. "Although generally the fairer your skin is, the more you are at risk. The same sun prevention risk applies to everyone, but some people need to be more careful."

It's lovely to feel the sun's rays on your skin, so it's good to know that a little sun exposure can be beneficial to health. Exposure to sunlight can help our bodies to produce vitamin D and avoid deficiency. "We all need the same amount of vitamin D on a daily basis to maintain healthy bones, but the rate our bodies produce the vitamin differs for everyone," explains Munn. "If you've got paler skin, you should aim for a short period in the sun everyday for about 10-15 minutes. Those with darker skin will need a little longer. You will still absorb the necessary rays while wearing sunscreen, but you'll need to stay out for longer."

Questions 7-14

- 7) In the introduction, what does the writer infer about summer skincare?
 - a) Only 10% of people need to use more skincare
 - b) Some people need clues to know how much protection to use
 - c) People in general don't know enough about it
 - d) 9 out of 10 people should use more sun cream





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- 8) What advice does Emma Shields offer?
 - a) effective protection involves using the right products and adopting the right behaviour
 - b) it is important to choose the right kind of sunglasses
 - c) sunscreen is more effective in hot rather than cold weather
 - d) you shouldn't forget about protecting the soles of your feet
- 9) What do we learn in the third paragraph about sun tans?
 - a) some kinds of sun tan are perfectly safe
 - b) in 75% of cases, sun tans are safe
 - c) sun tanning is a safe activity except for a small risk of skin cancer later in life
 - d) acquiring a sun tan is a risky activity

10) What does Emma Shields claim regarding after-sun lotion?

- a) it cannot provide any remedial remedies
- b) the body doesn't tolerate after-sun lotion as well as it does sun cream
- c) after-sun lotion can help the body's own mechanisms to heal faster
- d) it can fix some minor damage to the skin
- 11)What do we learn about sun block in the fifth paragraph?
 - a) oxides of titanium or zinc can reflect the sun's rays
 - b) it blocks a higher percentage of UV light on young skin
 - c) sun block that contains chalky substances can be used on children
 - d) it isn't as effective as most people assume
- 12) What advice does Dr Munn give in the sixth paragraph?
 - a) low factor sunscreen can be stored for longer periods than high factor sunscreen
 - b) each summer, it is worth buying new sunscreen
 - c) sunscreen should be stored in a refrigerator or similar low-temperature environment



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d) restocking sunscreen should take into account expiration dates

13)What danger does the last paragraph highlight?

- a) although they feel nice, the sun's rays always present a risk to health
- b) people with pale skin often do not produce enough vitamin D
- c) exposure to the sun in winter is just as dangerous as during the summer
- d) sunscreen can interfere with normal vitamin D production

14)What would be a suitable title for this article?

- a) The New Dermatological Crisis
- b) Sunscreen, Sun Cream and Sun Block A User's Guide
- c) How to Use Sun Cream and Sunbathe Safely
- d) Sun Tanning Changes in Recent Medical Opinion

TEXT 2

With the decreasing global boundaries and increasing activities, travel medicine has become a rapidly evolving field of medicine. Classically, travel medicine focused on individuals traveling to developing countries with prevention and treatment of malaria, traveller's diarrhoea, and general vaccinations as its primary goal. Travel medicine has subsequently become a dynamic multidisciplinary specialty that encompasses aspects of infectious disease, public health, tropical medicine, wilderness medicine, and appropriate immunization. Although these aspects are broad in reach, they are tightly integrated within the realm of travel medicine and require appropriate understanding prior to venturing out. Therefore, whether you are a humanitarian aid worker in Tanzania, a volunteer working in the Ebola-stricken areas of West Africa, a tourist, or a businessperson for a multinational corporation, understanding the dynamics of travel and the interplay of healthcare will minimize the adverse effect of travel-related illnesses and concerns while maximizing enjoyment and success for the trip.

The specialty of travel medicine is dynamic and vast in its medical knowledge requirements, as it focuses on the prevention and management of health issues related to global travel. Areas of expertise include vaccinations, epidemiology, region-specific travel medicine, pre-travel management and travel-related illnesses.



This increasing globalization of travel facilitates increased health exposures in different environments and the potential spread of disease.

Collaborative sentinel surveillance networks specifically to monitor disease trends among travellers offer new supplemental options for evaluating travel health issues. These networks can inform pre-travel and post-travel patient management by providing complementary surveillance information, facilitating communication and collaboration between participating network sites, and enabling new analytical options for travel-related research. TropNetEurop and GeoSentinel represent two major networks currently available. Data obtained from studying health problems among travellers may provide significant benefits for local populations in resourcelimited countries. However, given their limitations, they should be considered as complementary tools and not relied on as an exclusive basis for evaluating health risks among travellers.

With a heightened interest in adventure travel, international destinations, and ecotourism, more patients return from vacations with presentations of possible exotic disease that are beyond the scope of a primary care or emergency physician's daily practice. However, many of the illnesses encountered could be eliminated with adequate pre-travel education and preparation. In the circumstance when prophylactic treatment and lifestyle modification fail, physicians need to know what to look for and where to find information on exotic diseases beyond the scope of daily practice. Further information can be quickly and easily accessed through the CDC Yellow Book, an online resource providing country-specific information related to endemic diseases.

Whether the participant is on an excursion to Nepal, is serving at a medical mission in Belize, or is the adventure-seeking traveller, preparation is paramount to a successful venture. All people planning travel should become informed about the potential hazards of the countries they are traveling to and learn how to minimize any risk to their health. Forward planning, appropriate preventive measures, and careful precautions can substantially reduce the risks of adverse health consequences. Although the medical profession and the travel industry can provide a great deal of help and advice, the traveller is responsible to ask for information, to understand the risks involved, and to take the necessary precautions for the journey.

Travellers should ascertain the associated travel health information for their specific itinerary several months in advance of departure. This should include general health information such as vaccine requirements, prophylactic medications, disease



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outbreaks, political environment, and medical resources. As can be seen, this includes but is not limited to a pre-travel medical consultation and evaluation.

Improvisation (ie, creative use of unusual supplies for diagnosing, treating, splinting, transporting) is an invaluable skill taught in Wilderness Medical Society (WMS) and other similar courses. Efficient selection and knowledge of medications lightens the medical kit. For example, rather than carrying multiple antibiotics of choice for several possible infections, consider carrying a medication, such as ciprofloxacin, which despite some growing resistancy issues, treats travellers' diarrhoea (TD) as well as respiratory, wound, bladder, and other infections. Another example is diphenhydramine, which is excellent as an injectable local anaesthetic as well as treatment for nausea, allergic reactions, and insomnia.

In anticipation of upcoming travel, it is essential that one is well educated regarding the regions that will be visited and how one's current level of health may be impacted. Vaccinations are a vital part of any preparatory process. Once the regions of anticipated travel are identified, scheduling a visit to one's doctor or a travel medicine provider is essential—ideally 4-6 weeks before the trip because most vaccinations require a period of days or weeks to become effective. Reviewing current recommendations for the region of travel is recommended prior to the scheduled medical appointment. In addition, if uncertain regarding previous immunizations, variable tests are available to identify appropriate titer levels and whether updated boosters are indicated.

Questions 15-22

15)In the first paragraph, the example of Ebola is given to show

- a) an example of a disease that falls under the category of wilderness medicine
- b) not all diseases have a vaccine
- c) an example of a disease that may occur in an area where a travel medicine beneficiary could be present
- d) travel medicine can prepare you for any and all eventualities

16) What is one effect of the globalization of travel?

- a) it has increased the possibilities for health problems
- b) the field of epidemiology has had to develop quickly
- c) it has resulted in better healthcare facilities
- d) it has exposed existing diseases to new environments



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17)Increased disease monitoring has led to

- a) specific surveillance of certain disease groups
- b) advantages to both travellers and individual countries
- c) better quality analytical tools for healthcare workers
- d) a vast increase in exploitable medical knowledge

18) When do doctors need to find information on exotic diseases?

- a) when preventative measures are unsuccessful
- b) when travellers remain uneducated
- c) when they have limited access to the CDC Yellow Book
- d) when they are vacation in exotic destinations

19)What does the fifth paragraph inform the reader concerning responsibility?

- a) the medical profession have the responsibility to give specific advice
- b) the onus is on the traveller to investigate possible dangers
- c) excursion organisers are normally responsible for medical hazard analysis
- d) individual countries are responsible to publicize specific health-related hazards

20)Which of the following statements is not mentioned in the sixth paragraph?

- a) it is important to prepare well in advance
- b) before starting their journey, travellers should see a medical professional
- c) travellers should obtain items to ensure safe sexual contact (such as condoms)
- d) travellers should be well-informed about conditions in their destination countries or regions



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21) What advice is given about medical kits?

- a) it may be necessary to carry unusual supplies
- b) ciprofloxacin is preferable to diphenhydramine despite resistancy issues
- c) it is a good idea to pack injectable local anaesthetic
- d) preference should be given to versatile medicines

22) What does the eighth paragraph inform the reader about preparations?

- a) trips longer than 4-6 weeks need vaccination boosters
- b) preventative actions need to be taken one to two months before travel
- c) effective vaccines should be used rather than those that require boosters