

UNIT 3

WHAT IS THE FUTURE OF CONTRACEPTION?

Note: You should review these resources and links before use to check if they are appropriate for your pupils at Key Stage 3 or Key Stage 4 and in line with your school's ethos and RSE policy.

LEARNING INTENTIONS

Pupils are learning to:

- understand that no method of contraception is 100% reliable;
- understand that abstaining from sexual intercourse is 100% reliable in preventing pregnancy and sexually transmitted infections (STIs);
- accept that making a decision to have sexual intercourse will always involve a risk of pregnancy or STIs, even if that risk is very small;
- explore recent developments in contraception and understand the implications of each; and
- understand that there are different opinions and beliefs on when life begins and that this may affect choices around the use of some contraceptives.

SKILLS AND CAPABILITIES

- Managing Information
- Thinking, Problem Solving and Decision Making
- Self-Management
- Working with Others.

LEARNING EXPERIENCES

- Enquiry based
- Offers choice
- Investigating and problem solving
- Supportive environment.

ATTITUDES AND DISPOSITIONS

- Personal responsibility
- Curiosity
- Respect
- Openness to new ideas

Resources

- Resources A and B
- [Contraception Choices – How effective is contraception?](#)
- [World Health Organization – Family planning/Contraception](#)
- [Active Learning and Teaching Methods for Key Stage 3](#)

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Activity 1 Contraceptives and reliability

- In Unit 1, pupils explored the reliability of different contraceptive methods.
- Remind the class that, apart from abstinence, no contraceptive method is 100% reliable.
- Show the class the infographics on the Contraception Choices page [How effective is contraception?](https://www.contraceptionchoices.org), available at www.contraceptionchoices.org, which show statistics about the reliability of different methods when used correctly.
- This page also features information about the benefits and side effects of each method.
- Are there any figures that surprise the pupils?

Teaching Notes

- It's important for pupils to understand that there is a risk of pregnancy and, in some cases, STIs every time they have unprotected sexual intercourse.
- They should also know that the use of condoms considerably reduces the risk of pregnancy **and** STIs. The class could also discuss abstaining from sexual activity as a positive option for young people as it is the only choice that is 100% effective in preventing pregnancy and STIs.
- The World Health Organization page [Family planning/Contraception](https://www.who.int/family-planning/contraception), available at www.who.int, provides information about contraception worldwide, which will give a more global dimension to the discussions.
- You could use this information for a discussion and debate on the importance of contraception around the world.



Activity 2 Future contraceptive methods

- Explain to the pupils that, although there are many options currently available for contraception, no method is perfect and each has its own disadvantages and/or side effects. Scientists around the world are working to create more reliable, safer and cheaper forms of contraception.
- Give each pupil a copy of Resource A, which provides information on future options for contraception.
- Ask the pupils to read the information on Resource A and discuss it in groups.
- Then give each group a copy of Resource B.
- Ask each group to put themselves in the role of a business leader who wants to invest in advances and innovations in contraception.
- For **each scenario** on Resource B, the groups should:
 - decide which future method of contraception they would invest in from the information on Resource A; and
 - justify their choice.
- You may wish to assign specific scenarios to each group, depending on how much time you have.
- Facilitate a class discussion on developments in contraception and their implications for society in the future. Discuss the effectiveness of the contraceptive methods in light of their advantages and disadvantages.

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Activity 3 Review of learning intentions

It's important that pupils have opportunities to reflect on their learning. You can choose from a range of methods detailed in our [Active Learning and Teaching Methods for Key Stage 3](#) resource, such as:

- Dartboard Evaluation
- Graffiti Board
- Fist-to-Five
- KWL (Know – Want to Know – Learned) Grid
- Post-It Collection
- Think, Pair and Share.

RESOURCE A: THE FUTURE OF CONTRACEPTION

Scientists around the world are working to create more reliable, safer and cheaper forms of contraception. Here are a few examples that are being developed.

Ask your teacher for help if there's anything you don't understand.

Fertility apps

Apps are now available to help women track their menstrual (fertility) cycle. These apps can help women tell when they are fertile. This means that they can choose whether to have sexual intercourse or not.

The apps range from a simple calendar to more complex versions that require the woman to take her temperature every day.

As technology improves, more women may start using a fertility app as a hormone-free replacement to some other forms of contraception. **However, reliability can be an issue** as:

- the app depends on the woman monitoring herself every day; and
- women's fertility cycles can vary in length.

Contraceptive implants

An increasing number of women are using the contraceptive implant. A doctor or nurse inserts this small rod under the skin in the upper arm and it releases hormones for three to five years. If the woman wants to get pregnant, a doctor or nurse must remove the implant.

Scientists are now developing implants that are biodegradable and dissolve after a certain period of time. This means that they don't have to be surgically removed.

Another new type of implant will last up to 16 years and women can turn it off using a wireless remote control if they want to get pregnant.

Dual purpose contraceptives

Condoms have the advantage of providing protection against both pregnancy and STIs.

Researchers are working on other dual purpose contraceptives for women. One example is a ring that is placed in the vagina and not only uses hormones to prevent pregnancy, but also releases a drug to prevent HIV and herpes.

The male pill, nasal spray or cream

Researchers have developed a protein that slows down sperm. It could be delivered as a male form of the pill, a nasal spray or a cream. Men would take this several hours before sexual intercourse. However, its reliability would depend on the male using this contraception in the proper way, which may present trust issues for their partner.

**RESOURCE A:
THE FUTURE OF CONTRACEPTION**

A gel that blocks the sperm duct

Developed in India, this method of contraception involves injecting a polymer gel into the sperm duct to block the transfer of sperm. It works in a similar way to a vasectomy but without the need for surgery. The treatment can also be reversed with another injection that breaks down the gel. This method is showing positive results.

A daily gel that stops sperm production

This gel contains testosterone and progestin, which is a synthetic form of the female sex hormone progesterone that men also have in low levels.

The man applies the gel to his arms and shoulders every day. It shuts down the hormones responsible for stimulating testosterone production in the testes, which in turn reduces sperm production.

However, lowering testosterone production in the testes can lead to unwanted side effects such as problems with ejaculation or a low sex drive. The testosterone in the gel replaces the testosterone that would have been produced in the testes, but without starting sperm production again.

**RESOURCE B:
SCENARIOS**

Read the following scenarios.

You are a business leader who wants to invest in advances and innovations in contraception.

For **each scenario**, your group should:

- decide which future method of contraception you would invest in from the information on Resource A; and
- justify your choice.

Scenario A You want to invest in a product that will be used by couples who are in long-term, committed relationships and live in developed countries (such as the United Kingdom).

Scenario B You want to invest in a product that will offer protection and reproductive control to poor women living in less developed countries.

Scenario C You want to invest in a product that will be suitable for use by young people in developed countries who may not have committed to a long-term relationship.

Scenario D You want to invest in a product that will give men reproductive control.