

Sperm and Egg Donation and Online DNA Testing

– Information for Donor
Conceived People

These information leaflets are designed to help answer questions that donor-conceived people may have about online DNA testing. They are based on research from the ConnecteDNA project.

The ConnecteDNA project investigated how online DNA testing was used by donor conceived people, donors, parents by donor conception and their families. It was funded by the UKRI ESRC - see the project [website](#).

Please note that the information provided here relates to sperm, egg and embryo donation taking place in the UK.



General questions about online DNA testing

I have seen the terms ‘online DNA testing’ and ‘direct to consumer’/‘online’ genetic testing used. Are these the same thing?

Yes, these are the same thing. We will use the term ‘online DNA testing’ in this leaflet.

What is online DNA testing?

Online DNA testing, sometimes called ‘direct-to-consumer genetic testing’, is an online service available direct to the general public for a fee. People use these services to search for their ancestors, to search for genetic relations, or because they are interested in exploring their heritage or are seeking medical information about themselves.

The company providing the service analyses your DNA using a saliva sample. The information you receive depends on the company, as each offers different services. These may include reports on personality traits, health risks or genetic predispositions to certain conditions, wellness insights, ancestral origins, and matches with genetic relatives—people who share some of your DNA.

What online DNA testing options are available, and how do services differ?

Online DNA testing services: These are run on a commercial basis by private companies (such as Ancestry, 23andMe¹ and MyHeritage DNA). Each company’s service will have its own features, terms and conditions and privacy policies. These terms and conditions, and privacy policies, will differ depending on the provider and you should read these carefully before deciding which (if any) you are most comfortable using. At the end of this leaflet you can find links to resources that give information on what to consider when thinking about using an online DNA testing service.

¹We have included 23andMe in this list as we acknowledge that this is a provider that many people will have used and will recognise. However, we note that at the time of writing, July 2025, this company had filed for bankruptcy and there is a lack of clarity about who will buy the company and how users’ data will be handled by the new owners.

You will need to set up an account with each provider with a username and password and the results are then delivered via your online account.

Some people who are looking to identify genetic relatives using online DNA testing do tests using more than one provider, as they feel they are more likely to find genetic relatives. Some genetic genealogists have supported this approach. AncestryDNA has a DNA database of over 27 million people. 23andMe has a database of about 15 million people. You have to do a test directly with each company, but you can upload existing data to FamilyTreeDNA and LivingDNA to maximise your chances of finding relatives. Online DNA testing is more popular in the UK, Ireland, the US, Canada, Australia, and New Zealand than in many other parts of the world. If your ancestry is from countries that are less represented in these databases, such as Spain, or from certain ethnic backgrounds, you are currently less likely to find strong DNA matches.

More information is available from the International Society of Genetic Genealogy (see resources below).

As well as online testing, for historic donors in the UK, there is the Donor Conceived Register which is for donors and donor conceived people conceived or donating before 1st August 1991. This is not a commercial service. When you sign up to the Donor Conceived Register, operated by Liverpool Women's Hospital, you provide a DNA sample which is tested at the DNA Analysis Lab at Kings College London. The tests used for this service are different from the tests used by the commercial DNA companies. They test a very limited number of markers and can sometimes produce false positive or false negative results.² The main objective of this service is to match donor conceived people born from pre-1991 donations to the donor and to their donor siblings. This DNA database is not a publicly available commercial service and not linked to any others – meaning people will only find a match if the donor,³ donor conceived person or a donor sibling also submits their DNA to the Register.

² This information comes from academic research carried out by Jianye Ge and Bruce Budowle (2020): How many familial relationship testing results could be wrong? PLoS Genet 16(8): e1008929. <https://doi.org/10.1371/journal.pgen.1008929>

³ While we use the term 'the donor' in this leaflet, we note that the terminology around donor conception and the different parties involved is contested. We recognise that this will not reflect the language choices of all donor conceived people or others impacted by donor conception.

What are the data privacy implications of online DNA testing services?

When using an online DNA testing service, it is important to remember that you are providing personal data to a commercial entity and to understand the potential privacy risks associated with use of these services. Before deciding to use one of these tests, it is recommended that you read the company's Privacy Policy and think carefully about what you feel comfortable with. For example, you may wish to consider whether the company will share your data with third parties and what happens to your data if the company is sold to a new owner. We have included some resources at the end of this leaflet which may guide you regarding the key privacy issues to consider.

If I use an online DNA testing site, do I have a right to delete my data at a later date?

Under data protection regulations you have the right to delete data that you have uploaded to a website/app. However, that might, in practice, be difficult to achieve. You will need to double check the provider's terms and conditions and/or their Privacy Policy to find out how to request deletion.

It is important to remember that people who have 'matched' with you may have taken a screenshot or otherwise recorded the information about the match. Therefore, there are limitations to deleting the DNA once it has been uploaded and the 'matching' function of the DNA site enabled. Most DNA testing providers offer an option to turn off the 'relative matching' feature. It is also possible that the DNA testing provider has shared your data with a third party/parties. You will be able to find out about this in their Privacy Policy.

How can I start a search?

Your choice of DNA test will depend on the questions you are hoping to answer. For further information and an in depth analysis of the available options, see 'The Best Tried and Tested DNA Tests 2024', by Debbie Kennett. Further information is also available from the International Society of Genetic Genealogy. The links to these resources can be found at the end of this leaflet.

What information can I expect to receive?

At the time of writing, all the companies, all the companies will provide you with a report on your ancestral origins. They compare your DNA to reference populations and assign percentages of your DNA to different world regions (e.g., 15% Ireland) and populations (e.g., 45% Ashkenazi Jewish). Some of the companies will assign you to genetic groups (also known as genetic communities or ancestral journeys). These genetic groups are based on networks of people sharing large chunks of DNA and provide information about your more recent ancestry within the last 200 to 300 years. Some of the groups are very granular and will assign you to counties or sometimes even towns.

Each company has their own reference populations and proprietary algorithms so the results will vary from company to company. The results are also updated on a regular basis and so may change over time.

The companies will also provide you with a list of your relatives and a prediction of your likely genetic relationship, such as an uncle or half-sibling. The relationship predictions are based on the amount of DNA shared and the number of shared DNA segments. The more DNA shared the closer the relationship. The results are ranked starting with the closest relatives, and the list of DNA matches will include several thousand names. Some matches provide information about themselves in their profile and sometimes even a photo. Most of the sites allow the user to attach a family tree to their DNA results which can help you to work out your relationships. Most companies have an in-house messaging platform that will allow you to contact your matches. Some companies allow people to provide e-mail addresses.

In some cases, you can be matched at the outset with a parent, a child or a full sibling. These close relationships can be predicted with high confidence. With other relationships there is a range of possibilities. For example, if two people share 25% of their DNA this could represent a half sibling relationship, a grandparent/grandchild relationship or an aunt or uncle/niece or nephew relationship.

With some companies you need a subscription to access additional features. For example, at AncestryDNA a subscription is required to access the full family trees of your matches and to access the genealogical records to assist with your search. There is an additional ProTools subscription which provides further functionality such as the ability to see how your matches are related to each other – more information on which can be found on Ancestry’s website.

Some of the companies will provide trait reports which predict physical features (hair colour and texture, eye colour, etc), response to nutrients, personality traits, etc.

23andMe offers health reports. There are a range of reports providing information on carrier status for conditions such as cystic fibrosis and reports indicating your propensity to develop particular diseases such as Alzheimer’s or breast cancer. These reports are predictive not diagnostic and should not be seen as a substitute for medical advice.

How can I make sense of the information that I get back?

The companies have support pages which provide information to help you understand your results. Some of the companies provide educational webinars and videos. There are also various online support networks in the form of Facebook groups and mailing lists where you can ask for help (see list of resources at the end of this leaflet).



⁴ <https://support.ancestry.co.uk/s/article/AncestryDNA-and-Memberships>

Why can online DNA testing be important to people?

- **For donor conceived people:**

Online DNA testing provides donor conceived people with the opportunity to connect with their donor relatives and to identify the donor. This is one of the main reasons why donor conceived people want to do an online DNA test. The donor does not need to be in the database to be identified but can be identified by building out the family trees of other DNA matches and working out how they are related to each other. This process does, however, require some genealogical research skills and sometimes also access to subscription websites. Even if the donor conceived person is not interested in connecting with genetic relatives, the information about health or ancestral origins may still be informative. It is up to each individual if they want to undertake an online DNA test. Donor conceived people may find it helpful to discuss the implications of testing with their family and close friends before they make their final decision.

- **For parents or potential parents of donor conceived people:**

Some parents are interested in testing their child to identify the donor and/or to see if the child has any donor-relatives (often with a particular emphasis on half-siblings) in the databases with whom they can connect. It is important to understand that the existence of online DNA testing services means that, even if the parent does not tell their child that they are donor-conceived, they may find out in future if they choose to take an online DNA test.

- **For donors:**

Some donors choose to test so that they can be found by the people conceived from their donation. While it is up to the donor to decide whether or not to take an online DNA test, it is important to remember that the children born as a result of their donation may be able to identify the donor, even if the donor themselves has not done a DNA test. This is because the donor's relatives might have done a test, and the donor can be traced through their network of genetic relatives and genealogical research.

Is there anyone who can help me begin and manage a search for the donor and donor relatives?

Some people use third parties to help them with their search – though it is important to note that these services are not regulated. You may hear about people using a ‘genetic genealogist’ – this is someone who uses DNA evidence in combination with genealogical research in order to identify the donor. There are both professional and volunteer genetic genealogy services available. You may also see those who offer voluntary services referring to themselves as ‘search angels’ or ‘DNA detectives’. Links to some useful Facebook groups can be found at the end of this leaflet.

I am thinking of using the services of a professional genetic genealogist to help me with my search for donor relatives. What should I know before I do?

There are three organisations which advertise the services of professional UK-based genealogists:

- Association of Professional Genealogists (APG)
- Association of Genealogical Researchers in Archives (AGRA)
- Register of Qualified Genealogists (RQG)

These organisations all have their own codes of practice and provide a directory of their members. AGRA assesses the genealogical research skills of its members. RQG membership is based on genealogical qualifications. However, none of these organisations guarantee the genetic genealogy expertise of its members and therefore membership of these organisations does not ensure that the person will have the relevant skills to help with your search. There are also some members who advertise their expertise in DNA testing but may not have adequate knowledge or experience to provide good advice or a cost-effective service. You may want to seek advice from friends for word-of-mouth recommendations.

Specific questions donor conceived people may have about online DNA testing

I have found out that I am donor conceived after taking an online DNA test. What are my next steps?

Learning you are donor conceived in this way can be a big shock and is likely to give rise to a mix of emotions and lots of questions. This is perfectly understandable, and it is not unusual to experience this whilst you struggle to make sense of the information you receive from an online DNA test. This can be emotionally overwhelming and may affect your mental health and wellbeing. Your feelings might include:

- fury, anger, hurt, betrayal, disbelief, shock or sadness about not being told earlier, and grief for the loss of your identity,
- confusion about what this means for you now and in future,
- curiosity about the donor or your donor siblings and other people you may be related to, and
- a desire to know if there are any genetic or medical issues you need to be aware of, whether you share any physical or personality traits.

Some people, once they discover that they are donor conceived, want to try and find more information about the donor, their donor siblings, or other genetic relatives on the donor's side. Others decide not to do so, or not to do so immediately. There is no right course of action, and it may be that your decision changes over time.

You may have to think about whether you want to tell anyone about your discovery. This can be particularly complex for donor conceived people who have been raised with siblings and who they now realise or suspect could also be donor conceived (perhaps via the same donor). You do not have to tell anyone, but having the support of someone close to you might be helpful as you process your feelings.

Can I make contact with someone who has had a someone who has had a similar experience and who might be able to help me make sense of my feelings?

Learning that you are donor conceived via an online DNA test can be a huge shock. Receiving information unexpectedly often raises lots of questions, although for some people it also can confirm any feelings you may have had of being different to the rest of your family. Whether or not you choose to tell anyone close to you about the fact you are donor conceived, you might also find it useful to talk to others with similar experiences.

Donor Conceived UK (DCUK) is a charity bringing together a supportive community whose members have a wide range of experiences of being donor conceived. Through the DCUK community you can connect with other people who are either in a similar position, or who have been through what you are experiencing. They can understand and relate to you and your experience in a safe environment. They also curate a list of therapists who have experience in this area. DCUK welcomes donor conceived people aged over 18, who have been conceived in the UK. You can find more information about DCUK and contact details on their website, a link to which can be found at the end of this leaflet.



The Donor Conception Network (DCN) is the UK's first and largest charity dedicated to supporting donor conception families and prospective families. The DCN offers information, resources and links relevant to donor conceived people, and can offer you information or connect you with others in the same situation. You can find more information about the DCN and contact details on their website, a link to which can be found at the end of this leaflet.

The Human Fertilisation and Embryology Authority (HFEA) is the UK's fertility regulator. Since 1991, the HFEA has held a database of information about every fertility treatment carried out in the UK, called the Register. Donor conceived people and their parents can apply to the HFEA for information held about their donor and genetic siblings on the Register. They have also created web-based resources which might be helpful for you, the link to which can be found in the 'resources' section at the end of this leaflet.

If you would like to speak to a professional counsellor, there are currently not many counsellors who will have specific experience of talking about your situation. General counsellors are available through the British Association for Counselling and Psychotherapy and UK Council for Psychotherapy counselling directories or your own GP. For all but the latter you will need to pay for the service.



How can I speak to my parents/siblings to tell them that I know I am donor conceived?

If you are finding it challenging to come to terms with what you have discovered, it can be hard to know how to talk about donor conception. It can be especially difficult when your family members have kept the circumstances of your conception secret, sometimes for decades. While this might be difficult to understand, there are many reasons why your parent(s) might have kept the circumstances of your conception a secret – reasons which are often complex and personal. These could include:

- A sense of shame or embarrassment about having to turn to a donor to have a child,
- A worry that telling you that you were donor conceived might damage their relationship with you,
- A fear that they may be rejected because one or both of them are not your genetic parent,
- Wanting to protect you from feeling different, or from distress if you want information about the donor that you can't find,
- Having been told not to tell you at the time of treatment. This was common practice in the 1980s and 1990s and beyond,
- Not knowing what to say, and
- Putting it off because the right moment has not come.

Some donor conceived people think that it is better to be open and truthful, as secrets can be burdensome for everyone. However, it is not uncommon to feel worried or anxious about how to start a conversation in these circumstances. You might want to spare your parent(s) from feelings of sadness, or embarrassment. You might also wonder who does, and does not, know – and whether your siblings are also donor conceived. You might feel that it isn't your secret to tell, and worry that disclosing what you know will disrupt and damage family relationships.

All of these feelings and concerns are understandable and legitimate. However, ultimately you need to do what feels right for you. You are not alone, and there are groups, mentioned above, who can help you to make sense of your situation and work out what the right approach for you is.

Useful resources and additional information

Further information about using online DNA testing:

- [‘The Best Tried and Tested DNA Tests 2024’, tried and tested by Debbie Kennett](#)
- [International Society of Genetic Genealogy, ‘Beginners’ Guide to Genetic Genealogy’](#)
- [‘Before You Buy DNA Tests - Things to Consider’: a short video containing information on what to look out for is available in this short video, based on research conducted in New Zealand](#)
- [Office of the Privacy Commissioner of Canada, ‘Direct-to-consumer genetic testing and privacy’ – a useful resource that can help guide you regarding the key privacy issues to consider](#)
- [Blog exploring the potential insurance implications of DNA testing](#)
- [Royal College of General Practitioners position statement on genomic testing](#)

Support organisations

[Donor Conceived UK](#)

[Donor Conception Network](#)

[British Association of Infertility Counsellors \(BICA\)](#)

The regulator

[The HFEA have information on donor conception](#)

And <https://www.hfea.gov.uk/donation/finding-out-about-your-donor/counselling-and-support-for-donor-conceived-people-and-donors/>

And <https://www.hfea.gov.uk/donation/finding-out-about-your-donor/commercially-available-home-dna-testing-and-matching-websites-and-their-implications-for-donor-conceived-people/>

Donor Conceived Register (DCR)

See: <https://www.liverpoolwomens.nhs.uk/our-services/donor-conceived-register-dcr/>

Facebook groups which can support donor conceived people who are seeking information using online DNA testing:

- [DNA for the Donor Conceived – a specialist Facebook group which provides support for donor conceived people](#)
- [DNA Help for Genealogy UK - provides advice on the interpretation of DNA results.](#)

Acknowledgements

We would like to thank all those who took part in our study and our advisory group for all their input and support. Particularly:

Donor Conceived UK

The Donor Conception Network

Debbie Kennett

Marilyn Crawshaw

Julia Feast