

New Catering and Biometric FAQs

Who are Olive Dining?

Olive Dining is an established catering company that provides food to a large number of schools, including the two other schools in the Community Schools Trust, Forest Gate and Cumberland School. They have an excellent track record at both of these schools. They provide a wide range of catering options for students and staff and focus on healthy produce, freshly cooked each day. They will be able to provide a hot breakfast in the mornings, a healthy snack at break time and a varied menu for lunch. Once our students return, they will be surveying students and parents in order to ensure they provide the best possible offer. We are sure you will be impressed.

What is BioStore?

BioStore is a central database located within school which allows students to pay for their food and other items using their finger. It stores the information which identifies students uniquely for each of the applications used in a school. We would be using the system for our students to pay for any food they buy in school.

BioStore requires students to register only once, usually by placing a finger on a scanner, although other identification methods are available.

Why use BioStore instead of other existing identification methods?

BioStore's centralised system speeds up registration – each student needs to only register once, no matter how many applications requiring identification are in place at the school.

There are many benefits with a biometric system. Students cannot borrow or steal credentials from each other, reducing the opportunities for bullying. The system is linked to the online payment system so will identify what funds the students have in their account for them; there will be no need to remember a pin code or carry a card which could be lost or stolen. As a catering solution, queues are reduced because the speed of identification is much quicker with biometrics.

Biometric systems save time and money for both schools and students because the need to replace lost cards and forgotten passwords is eliminated.

Does BioStore record images of individual fingerprints?

BioStore does not store images of fingerprints on its system, and never will. Only mathematical representations of certain minutia points of a finger (where a fingerprint ridge ends or splits in two) are recorded. Typically, between ten and sixty minutia points are recorded depending on the characteristics of the finger. This mathematical data is encrypted and is called a template. The data is extremely secure in its encrypted form, and

even if it were not encrypted it would be impossible to recreate the original fingerprint image from the stored data.

Is it possible to recreate a fingerprint from the data stored by BioStore?

No, the BioStore system only stores a short string of encrypted numbers, too little data for the original print to be reconstructed.

How secure is the stored data? What would happen if somebody stole it?

The BioStore database is protected by a licence key, meaning that the database and any backup of its contents can only be accessed on licensed hardware. The hardware is stored in the school's own secure facility. As such, the encrypted data is only available to the registered licensee. Even if a school's security were to be compromised and a backup of the database stolen, the encrypted data would still be unreadable, even by another school.

If I lose my bank card then it can be replaced. But I can't replace my finger. If a template is stolen, have I lost my identity forever?

The simple answer is no. The finger template stored in the database is merely a string of encrypted numbers. If this string of numbers were to be removed from the database, it would be useless, because it cannot be recognised as a fingerprint. A fingerprint scanner checks for a real finger – it does not recognise a string of numbers.

Could the police or a court of law use the fingerprints stored in a BioStore database?

BioStore does not store fingerprint images. The recorded templates are a set of numbers which represent each person. This set of numbers will be unique within populations of hundreds, or a few thousands, of people. However, in a wider population the system is not accurate enough for the templates to be usable for forensic matching with any degree of certainty. A court of law would not be able to use this information as evidence.

What happens about twins, or someone who has hurt their finger?

Even identical twins have different fingerprints, and will not be mistaken for each other by BioStore. In very rare cases there are people who are born without fingerprints. Occasionally someone's fingerprint may deteriorate because of exposure to some chemical products, and sometimes temperature changes can cause reduction in fingerprint quality. However, a cut finger would not cause any problem for BioStore, unless it resulted in major disfigurement.

Is there any alternative for students who are unable to provide biometric data for some reason, such as a disability?

Alternative identification methods, such as smart cards and name and photo identification, are always available in BioStore systems. Students unable to provide biometric data can opt to use one of these methods, as can any student who prefers not to use biometrics.

If I object to my child being fingerprinted, what will happen?

The school will issue any student who wishes to opt out of the biometric system with an alternative method of identification. BioStore recognises a number of identification methods, including smartcards, PIN numbers, passwords and name and photo lookup.

What will happen to the current cashless School Money System?

The current cashless system School Money will continue. School Money works very well with the new biometrics system. As now, the cashless system will allow parents to top up online. This allows for quicker serving times and shorter queues. The system recognises each individual student, holds their individual account balances, and records money spent and received. It records where money is spent, on what food, and on any specific date, at any time of day. As a parent you will also have access to this information.

How are pupils recognised by the system?

Each student will create a finger biometric. A scan of the finger is taken and a template created (a string of encrypted numbers based off the finger scan). The rest of the finger image is discarded which makes reverse engineering the fingerprint from the data stored impossible. Students will then be able to use their finger biometric to identify on the system and authenticate actions.

How is a finger biometric used to obtain a school meal?

The student simply places their finger on the biometric reader at the point of sale. A display will show the server the student's name and current account balance held within the system. The selected food items will be entered into the system from an itemised keyboard, while the amount spent and the new account balance will show on the display.

How is money entered into the system?

As currently, parents top up their child's School Money account online or by card.

How does a student check what their current balance is?

- (a) The School Money system used to make payments can be used to check the current balance of a catering account.
 - (b) ID point machines, which we will have in school, can be used to check the current balance. Pupils simply scan their finger on the reader to display the current account balance.
 - (c) The customer display till at the point of sale will also show the new account balance.
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How much can be spent in one day?

A daily spend limit will be set for all students and no food above that limit can be bought. On request, an individual student limit of your choice can also be set, to include a school dinner and break time snacks.

What about students entitled to a 'free school meal'?

The system works exactly the same for all students whether they pay or have a free school meal. All students have their own account and use it in exactly the same way regardless if on free school meals or not. The amount allocated for free school meals will simply be entered into the system by the software daily.

The system will then allow the required cash amount for each individual student to be allotted to their current account balance. However, any under spend or missed dinner will be identified by the system and will not be added to the next day's balance.

The parents or student can also add extra funds to his or her account by using the School Money system. This enables a greater daily spend on school dinners than allocated by their free meal allowance. As the free school meal allowance can only be spent on a school dinner, extra funds added into the system can be used for break time snacks.

Data Handling

Certain data will be held on the system to enable accurate operation. This will include your child's name, class, photo, account balance and meal entitlement. This data will be handled under the guidelines of the data protection act and only used by parties directly involved with the implementation of the system. If you have any concerns, please contact the school.
