

Understanding Food Preparation Equipment

Food preparation equipment is the important stage between fresh food coming into the kitchen and being made ready for either cooking or direct service into the restaurant. The equipment ranges from potato peelers, gravity slicing machines, juicers and multi-function food processors to the traditional hand-held food preparation tools such as kitchen knives and the speciality food preparation tools all good chefs have in their workbox.

There is a wide range of food preparation equipment, but some are necessary items rather than “nice-to-have” items, depending on the style of food the kitchen wishes to offer.

While there is a temptation to buy in ready-prepared vegetables, the kitchen does not always get the best quality with ready-prepared vegetables. It's a very price driven business, so there is pressure to use older, cheaper potatoes and big woody carrots because they are quicker to peel than small sweeter carrots.

For high volume users of potatoes it can be more cost-efficient to buy sacks of fresh potatoes and prepare them for boiling or frying than to buy in chilled or frozen prepared chips or ready-peeled potatoes in gas-flushed bags. Fresh potatoes will always give a better flavour and buying by the sack give the kitchen control over which variety of potato the customer is being offered.

Chefs think they get a more consistent product when they buy ready-turned carrots, but they don't – there is so much urgency to churn out the volume and meet a competitive price that buying ready-prepared vegetables can mean the kitchen does not know what is being bought.

Ready-sliced meats are never going to be as fresh tasting as that freshly sliced, packet fruit and vegetable juice cannot match that of freshly squeezed. There is a very strong argument both on food quality and food cost for a kitchen preparing fruit and vegetables in-house.

Food preparation processors

These are at the heart of food preparation equipment in the commercial kitchen. Those sold into restaurant kitchens are much more advanced in construction, versatility and robustness than the lightweight food processors sold for the domestic market, which cannot deliver chopped food acceptable on the restaurant plate. Expect to get a far wider choice of cutting shapes, chopping features and mixing programmes than anything offered in the domestic market. Motors are stronger, blades sharper, speed of processing quicker. The accessories available can produce any size or shape of fruit and vegetable a professional kitchen would want.

Stick blenders

These are medium to heavy-duty versions of the domestic stick blender, but are very much bigger and very powerful. They can pulse large quantities of foods very quickly and have a wide range of uses, helping sauce and puree making in every kitchen, from hospitals to Asian restaurants.

Potato peelers

The theory of potato peelers has hardly altered in 50 years. The sides of the chamber are gritted with a revolving gritted base plate, which actually does 90% of the peeling work. The only real advance has been in double-sided base plates, which feature a coarse grit for peeling old potatoes and a lighter grit for soft-skinned new potatoes.

Choosing a potato peeler size is all dependent on daily throughput, but do the calculation based on 75% of the stated capacity. Overfilling the machine slows down the process, tends to throw squared potatoes and is very wasteful. Another important working practice is to get the machine running before putting the potatoes in. To load the machine before switching on puts the motor under great strain to get moving against the resistance of the potatoes.

Carrots will clean in a standard potato peeler, most manufacturers offer a gentler base plate for skinning onions and salad baskets are available for spinning off washed salads.

Gravity slicers

Their main use is for cutting fine slices of cooked or raw meats, for fish, such as tuna and smoked salmon and other items such as cheese or where the ingredient is too big to fit in a mandolin. With cooked meats, the benefit is that whole cooked boneless joints can be used, giving a fresher, juicier slice and far cheaper than buying pre-sliced. Expensive meats such as dry-cured hams can be cut as wafers for use in salads, as starters, part of a main course or for luxury sandwiches.

A gravity slicer can also be used for cutting wafer thin slices of raw meat such as beef for producing items such as beef olives.

Food safety and food hygiene are extremely important issues with gravity slicers. While cutting cooked meats without strong flavours will not give cross-contamination, after cutting highly spiced or garlicky meats, a careful wipe with a sterile cloth will keep following foods pure.

A full cleaning cycle is essential between cutting raw and cooked food to prevent a serious risk of bacterial infection and a full cleaning must take place at the end of every kitchen service. Slicers are extremely dangerous items of equipment and staff need structured training on how to use and clean them.

Bowl mixers

Also called orbital mixers, these are useful for a bakery or patisserie section of a kitchen and heavy mixing jobs in the main kitchen such as mashing potato. If a kitchen wishes to bake its own bread, it may be worth thinking about a dedicated dough-mixer,

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otherwise, a standard bowl mixer will do both dough and batter beating.

Look After It!

Commercial food preparation equipment is manufactured for high performance and long, hard use. That brings with it the temptation to think it is so robust it does not need the same level of care as more expensive and technically complex items in the kitchen such as the combi-oven or the automatic coffee machine. Food preparation equipment will last a long time and give consistent high performance, but only if it is used properly and looked after properly. This is how to get the best from some of the popular pieces of food preparation equipment.

Potato peelers – These are very low maintenance. The main regular check to do is that water outflows are not clogged with peelings. The electric motors in commercial potato peelers are built to withstand long and regular use, but what can cause excess wear on the motor is if the peeling tank is consistently overloaded with potatoes. This not only puts strain on the motor, but will prevent the potatoes from being peeled efficiently.

Eventually, the grit wheel or the walls of the tank will need re-gritting. The time when needs to be done is for most kitchens measured in years. To maintain food costs, when a potato peeler has been re-gritted, kitchen staff need to be advised that peeling times will be much shorter than they have been used to and a careful watch is needed in the first few weeks of vegetable peeling to establish new, shorter peeling times.

Gravity Slicers – These are almost always used for slicing cooked foods, so thorough cleaning is not just looking after it mechanically, but for food safety. Sharpening of slicing blades should not be necessary through the lifetime of the unit unless raw meat containing gristle and bone is regularly being cut. Even then, the speed of the cutting wheel on a good quality slicer will be able to perform with some slight dulling of the edge.

Stick blenders – These work tirelessly in pulverising sauces, but the most common cause of motor burn-out is using too small a blender for the food in the pan. Hand blenders are available in a wide range of size and motor powers. To get long life from the blender, go big. This is particularly true with pulsing heavy sauces. Beyond cleaning, there is no maintenance needed on stick blenders.

Food processors – Providing a commercial model has been bought, these are very easy to maintain. Blades are very robust and as long as the right food is matched to the recommended blade there is unlikely to be any maintenance problems. Even if a blade is being regularly used to chop an unusually tough ingredient and becomes blunt, replacement blades are available. It is good practise to retain one fine chopping blade which is for chopping fine herbs such as parsley so it remains sharp.

Bowl mixers –Commercial models are extremely reliable and can be almost maintenance-free for many years apart from a regular safety check and greasing of the gearing by a service engineer on a scheduled visit. The main thing which will accelerate wear on the motor is overloading or putting dense product on a high-speed action instead of working through the gears until the mix becomes well broken. Care should also be taken that if a safety guard is fitted to prevent hands being put into the bowl during mixing that it is always working. For it not to be could be a serious health and safety issue for employees.

In brief

Do

Clean gravity slicers daily
Periodically check the grit in peelers
Cut frozen food on a gravity slicer
Check for stove singeing on blender power cables
Allow food debris build-up on gravity slicers

Don't

Overload potato peelers
Allow meat bones on a gravity slicer
Use low power blenders for high power jobs
Have faulty hand guards on bowl mixers
Allow peeler drains to become blocked

How to find out more about food preparation equipment

Talk to the experts.

The Catering Equipment Suppliers Association

Tel 020 7233 7724

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Website: www.cesa.org.uk

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