



## Microwaves Feature

### EDUCatering Magazine – February 2015

*Please attribute any comments to Kris Brearley, Sales Director, RH Hall*

**How essential are microwaves to a school catering operation? What are the benefits of using a microwave?**

They are essential for speed of service – considerably faster than conventional ovens and they also allow an operator to offer a wider choice of menu. Their versatility also provides advantages and the leading brands are developing models with new features and functionality in response to customers looking for product innovation, so they can be easily operated from a de-skilled base. Microwaves are very energy efficient too. In fact, when cooking vegetables they use three times less energy than that of a gas hob. Their footprint is also smaller than conventional ovens, great where space is at a premium.

**Are school caterers good at getting full use out of their microwave?**

I don't believe so – understanding is still the key to success with microwave cooking. To maximise usage of a microwave effectively, I think it is paramount that all cooks / caterers are educated as to the full potential of their unit and also be receptive to implementing the alternative cooking techniques required and then they'll be able to fully appreciate the great results that are possible and implement its use more and more in the meals produced by their kitchen.

By fully understanding their microwave and getting the right techniques for each type of food, succulent meat, poultry and fish together with perfectly cooked vegetables that retain taste, texture and nutritive value are all possible. Many of the techniques used in microwave cooking are the same as used in conventional cooking, but with a few minor adjustments.

There is a great deal of diversity of dishes that can be prepared quickly and easily from fresh ingredients. Not only that, but more nutrients are retained in microwave cooked food than by any other cooking method. In fact, correctly cooked vegetables contain 85% of their original vitamin content, when boiled they often contain none! A great benefit especially for growing children where they would only need to eat a little to get more of the vitamins they need.

Cont'd ...



Historically there has been a lot of negativity towards cooking with microwaves, but there shouldn't be, microwaves can cook great food in a fraction of the time it would take with other methods. Not only do they save time, but money and nutrients too.

Some schools are using their microwaves to the maximum if they have gone down the plated meal route for example – that is using ready plated meals solutions regenerated through a system that uses microwave technology such as the *iWave*®. This route is a very effective way of turning round complete meals in a short service period and a very viable option for schools especially where kitchen space may be a limiting factor – especially in light of the provision of school meals to all KS1 pupils from September of this year and where additional resource and equipment will be required. It's a system that relies on utilising microwave technology to the full.

### **What sort of foods and dishes can be prepared in a microwave?**

Today's microwave ovens are sophisticated, yet easy to use and produce excellent cooking results in a fraction of the time it takes to cook foods conventionally and their versatility is under estimated. Many foods and dishes can be cooked very, very well in a microwave oven: cakes, sauces, meat, fish, vegetables, fruit, pasta, rice, eggs and jams can all be cooked with great results – you can even roast a chicken in one, but you won't get a crispy, brown skin! However, a duck will cook well because of the amount of fat naturally found under the skin of the meat.

Meat and pastry products are often better cooked conventionally then re-heated in a microwave oven, but with the versatile combination microwave ovens available, these types of foods can be cooked with microwave technology with excellent results.

### **Are there any new/upcoming technologies to hit the microwave market?**

Leading brands are developing models with new features and functionality in response to customers looking for product innovation. One key is not just the equipment itself, but in menu's and food products too – the marrying of equipment and food/menu developments to get the maximum quality, value for money and labour saving solutions. We have been working with leading food producers and packaging companies to develop dishes specifically for microwave regeneration (see case study attached)

### **What space considerations do caterers need to consider when buying new microwaves?**

Microwaves are easily accommodated within most operations – even the smallest. They can be simply positioned on a table top, taking up very little space, alternatively some models can be stacked on top of each other where more than one is required or they can be housed on specialist brackets/shelving – such as the new Microwave Shelf from Simply Stainless, available exclusively from RH Hall. This heavy duty shelf will allow operators to securely site their microwave wherever they require safely. It's built to withstand the rigours of loading and unloading dishes from the microwave.

Cont'd ...



- Please include any other comments that you feel our readers will be interested in.

### **Top tips for school caterers thinking about using their microwave more**

Whilst it is common for caterers to choose speed (the higher the output the faster reheat times), it is also very important to understand that for some food products too much speed will destroy smaller portions of food or the delicate and sugary types of products. The higher output models (above 1900 watt) are designed for the reheating of larger portions of food and as the oven cavity sizes are much larger than the regular commercial microwave the requirement of more microwave output is vital to aid more even cook/reheat result.

Overcooking is one of the common problems experienced when new to microwave cooking or introducing new dishes. It is better to undercook first until you are familiar with a recipe, test it and then increase the cooking time. You should also factor in standing time and test a dish after this – a bit of trial and error will help establish the correct timing for a perfect result. You can always put it back in the oven for an extra minute – whereas overheated or overcooked food is ruined.

Consider each of the foods you are cooking – every food has a different moisture, fat and sugar content and different starting temperatures – e.g. refrigerated, ambient etc. and these factors all affect cooking times and can affect the final result.

If unsure, always start with a recipe you are familiar with – if you have cooked it before you will know exactly what the finished dish should look and taste like, so you can then compare and tweak the cooking procedure to get the same result

When using your microwave on a regular basis, one tip that shouldn't be overlooked for getting the best from a microwave is regular cleaning - keep the oven's cavity and inner door clean of food spillage / deposits at all times. This will avoid cavity burn ups and prolong the life of its heart "The Magnetron". This measure will also help the consistency and speed of reheat/ cook times.

As a final note, I think school caterers should seriously look at the *iWave*® plated meal solution is they would like to use microwave cooking more in their operation. The ability to implement this meal system into a school is extremely straight forward and cost effective and we have lots of food to plate offerings to suit school requirements.

### **What to consider when choosing a microwave...**

If a caterer is looking to invest in new microwaves, they should look at a microwave with variable power, as this will allow more dense food products to be reheated/cooked slower allowing for the conduction of heat to work through to the middle to avoid an overcooked outside and raw centre! The use of variable power works in the same way as your hob and gives you the exact control you need to create speed yet a quality cooked/reheat result.



A further feature to look for is stage cooking. This allows an operator to program in a series of different defrost /cook / reheat tasks to allow a complete process to be carried out at the press of a button. For example, it is possible to defrost then cook and keep warm ready for serve up all in one go. Most leading brand models now have this function as standard.

### **Consider a combination microwave...**

Depending on the use of the microwave and the dishes/menu offered, a combination microwave oven may be a good addition – it is likely that most caterers have a need for reheat, defrost and cooking tasks and in this case, it is recommended that both a combination microwave oven and a microwave oven be both purchased. A combination microwave oven will not replace the need for microwave oven and vice versa. These two types of oven work extremely well in tandem together. For example, whilst reheating /cooking pastry products using the combination model the ordinary microwave is available for all your straightforward reheat/defrost requirements. The features available today allow a choice of manual and programmable models and some even allow the chef to enter the detailed names of individual dishes and daily/weekly specials (as with the Maestrowave Combi Chef 7). As the name suggests, the Combi Chef 7 is able to operate in a variety and combination of modes making it the most flexible, efficient and easy to use oven yet! If the chef wants to bake, roast, grill, steam, defrost, regenerate, microwave, boil or simply keep food warm this is the oven that can do it all.

### **Alternative applications...**

#### **The revolutionary *iWave*® Plated Meals System**

Meal delivery can be dramatically improved whilst cutting food wastage and energy costs with the unique, fully automated *iWave*® ‘straight to plate’ foodservice solution. Suitable for chilled, frozen and ambient foods, it’s very economical to run with an eco-friendly carbon footprint, providing a saving of up to 70% over conventional foodservice methods.

With this system, school catering operations are able to provide children with a choice of good quality, nutritious hot meals that can be served within five minutes of selection.

The *iWave*® is extremely easy to use - manual controls have been replaced with a “fool-proof” barcode scanner and unique encrypted barcodes on dishes, with any chance of operator error being removed; every meal is delivered on demand, on time and at its best, every time. And because the food is not handled, it creates a very hygienic operation. Any foodservice volume demand can be accommodated.

The *iWave*® system also features a stock control system and this can replace much of the manual intervention currently required to re-order stock. The added benefits of waste and stock loss reporting will give management early warning of slow moving lines and potential misappropriation of stock.



Every time one of the unique *iWave*® barcodes are scanned, the identity of the food or user is recognised and logged by the system. The information is sent to the *iWave*® server via a wired, GPRS or wireless connection. Alternatively information can be stored on the *iWave*® and downloaded directly to a laptop or PDA with an infra-red or Bluetooth connection.

The use of the full e-reporting capabilities of the *iWave*® are optional. The system will work as a simple scan and cook unit if preferred. Other reporting needs can also be provided for on a bespoke basis.

***iWave*® System highlights:**

- **Suitable for fresh, frozen and ambient food products**
  - **100% error proof with consistent and safe food regeneration**
  - **Menus can be created to meet any dietary or nutritional values. RH Hall has worked with a number of specialist plated meals suppliers with the *iWave*® system**
  - **Operates off a standard 13 amp plug, small footprint ideal for restricted space**
  - **Fully mobile to create a flexible and versatile system – can be**
  - **Very economical to run with an eco-friendly carbon footprint providing a saving of up to 70% over conventional food service regeneration**
  - **Up to 50% capital cost saving compared to traditional regeneration equipment**
  - **Full management reporting, automated stock control, HACCP**
  - **Ability to fix the required food margin and control budgets**
- 
- **Please include a definitive website address where readers can go for more info on your company**

[www.rhhall.com](http://www.rhhall.com)

[www.microwaveassociation.org.uk](http://www.microwaveassociation.org.uk)

[www.maestrowave.com](http://www.maestrowave.com)

**CASE STUDY**

**Innovation ready on a plate!**

Culinare Foods is a manufacturing company based out of a 35,000 sqft production facility in Lancashire and specialises in producing meal solutions within innovative packaging concepts. The product range concentrates on three key areas of sandwiches, hot eating snacks and more recently working with RH Hall, Tony Aram of Pro-position and the innovative Torus Pak® packaging, Culinare have launched the next generation of 'Straight to Plate' meal solutions.



PAGE 6

A choice of 30 meals, including an 'all day' breakfast, traditional roast beef and Christmas dinner, have been created by Culinare's development chefs, and the single portion meals are presented in the revolutionary Torus Pak® packaging system, which Culinare are exclusive partners for in the UK. The packs feature a twin removable film, opening from the bottom so the chef's presentation once on the plate remains intact - maximising the attractiveness and appeal of each ready meal.

Peter Kitchener, the Sales and Marketing Director at Culinare foods comments, "We had been working with Chris O'Neill and the team at RH Hall for quite a few months developing the joint technology of both "Straight to Plate" and the iWave. As soon as we saw the iWave it was evident what benefits could be achieved in many sectors of the foodservice market. Seeing the ability to efficiently reheat our products from a very low skill base, ensuring that all of the necessary due diligence is taken care of automatically, we then knew we had to add the bar code technology to our "Straight to Plate" meals". The iWave system also keeps food wastage to a minimum, allowing for an 'on demand' meals service.

The new concept will fit a number of business environments, from casual dining to room service and function/event catering, even opening up new possibilities for foodservice operators. Orders for as little as 24 portions can be placed with Culinare on a next day delivery basis.

This concept will be rolled out across Europe and Culinare already have over 30 iWaves in locations in the UK and Republic of Ireland. For more information, visit [www.culinarefoods.com](http://www.culinarefoods.com).

-Ends-

17<sup>th</sup> December 2014

FOR FURTHER PRESS INFORMATION CONTACT: LINDA STONE, MEDIA MONKEY TEL: 07880 734326 OR  
EMAIL: [lindastone2010@hotmail.co.uk](mailto:lindastone2010@hotmail.co.uk)

R H Hall, Hallco House, Beacon Court, Pitstone Green Business Park, Pitstone, Beds, LU7 9GY  
T: 01296 663400 F: 01296 663401 E: [sales@rhhall.com](mailto:sales@rhhall.com) W: [www.rhhall.com](http://www.rhhall.com)