



Paul Meikle-Janney (pictured above) runs the Western Coffee Training Centre for the Speciality Coffee Association of Europe. He also runs training courses and audits for a number of major coffee chains and independent coffee houses.

In this article, he has taken time out to describe in detail the techniques baristas can use to get the best from milk in order to make high quality lattes and cappuccinos.

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It's good to see that improvements are being made in the quality of espresso in the UK.

Cafés and coffee companies are paying increasing interest to training, the superior skill of a barista on a traditional espresso machine is being trusted by some major brands who had used bean to cup machines, and the range and diversity of coffee in our supermarkets has never been better. But we still have a long way to

skimmed, long life, Soya or goats milk. Each different milk will give you a different consistency of foam and a different flavour, so it is for you to choose what your customers require. For example a restaurant may want the rich soft foam of full fat milk to complement a lavish meal, although someone serving to health conscience office workers may choose skimmed.

To more fully understand the differences in the foam

yolk before whipping the high protein egg whites).

Understanding that it is protein that is the key to foaming helps to explain those times when we are struggling to foam as successfully as normal. For example we may struggle if our milk is not fresh. As milk gets older the milk fats start to break down to fatty acids progressively making milk harder to foam. You may also have heard that milk protein may vary over the year,

At times of low protein, the levels can be boosted by the addition of whey, to ensure compliance with regulations on protein levels.

Tools of the Trade

Support your Barista by supplying them with decent tools for their craft. This starts with decent jugs. These need to be made of stainless steel and are normally of two types. A foaming, or belly jug, has a wide open top to allow foam

to fall freely, whereas your latté jug has a pronounced spout for directing the textured milk.

Both these jugs are wider at the base, completely opposite to the conical kitchen measuring jugs I often see people struggling with. The other main tool is the steam wand itself. Baristas are probably most comfortable with the familiarity of the wand that was supplied with the machine, but for me this is one of the

as I want to.

Producing your cappuccino When producing your cappuccino you will need to use both of the key milk techniques, foaming and texturing. Foaming draws the air into the milk, held within the bubbles, and texturing distributes this air evenly and breaks larger bubbles into finer ones. Start with a foaming jug a third to a half full of fresh cold milk. You do not want to overfill the jug as you will need space to accommodate the foam you create, but conversely, trying to foam very small amounts of milk will mean it heats to quickly to foam successfully. Cold milk is best for a number of reasons. It is more likely to be fresh (see above). It gives you longer to apply the foaming process before reaching the desired temperature, and the foam texture is best when created at lower temperatures (under 100°F). Continuing to add air above 100° creates harder bubbles rather than the smoother consistency most desired.

biggest deciding factors about which machine I would buy. I prefer a steam arm that is long enough to accommodate large jugs so that I can produce a number of drinks quickly, and that extrudes clear of the machine so that I can position my jug exactly

Purge your steam wand by giving it a quick blast.

Place the tip of the steam wand just underneath the surface of the milk and turn on the full power of the steam (1 bar). Positioned at such a point, the steam will cause a little circular wave motion in the milk drawing air in. Listen. If this process is done successfully then the noise will be a high pitch sucking, chirping, sound (when training we liken it to the sharp intake of air that Hannibal Lecter takes when describing his meal of fava beans and a "nice Chianti").

If the steam wand is too deep then you will hear the deep growl of the steam hitting the base of the jug. If the steam wand is just out of the milk you will hear the

Milk matters

go! I have been decorating recently using two paints from two major paint manufacturers, one called 'cappuccino' and one called 'espresso', and which both companies managed to spell wrong. A small point I know but still indicative of what people can get away with.

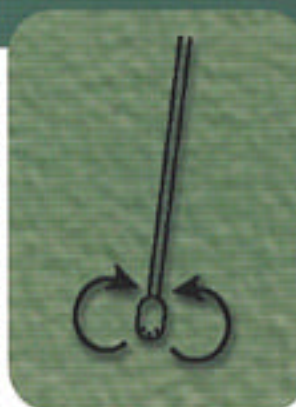
Most customers tend to be cappuccino and latte drinkers. Although a good espresso is vital to both, well executed milk is equally important to complete the drink. In this article, I will focus on milk.

What milk is best to use This is a question that I am often asked as a trainer. My answer is normally to choose the milk that your customers prefer. Despite often conflicting information on the subject, all milk will foam be it full fat, semi or

and make your choice, we must first understand what it is in milk that allows it to foam - protein. When air is forced into the milk with the steam wand, it is the protein that traps it by forming the bubble structure. The other elements in the milk then lie around these bubbles to give different tastes and consistencies. In the case of full fat milk, the higher level of fat around the bubbles, and fat's ability to inhibit and breakdown the foaming process to a certain degree, leads to creamier, softer foam. Skimmed milk with its low fat content, and often fortified level of protein, will foam successfully but giving a lighter, 'harder' end result. Chefs have understood the relationship between fat and protein for years (when making light meringues the chef separates the fatty egg

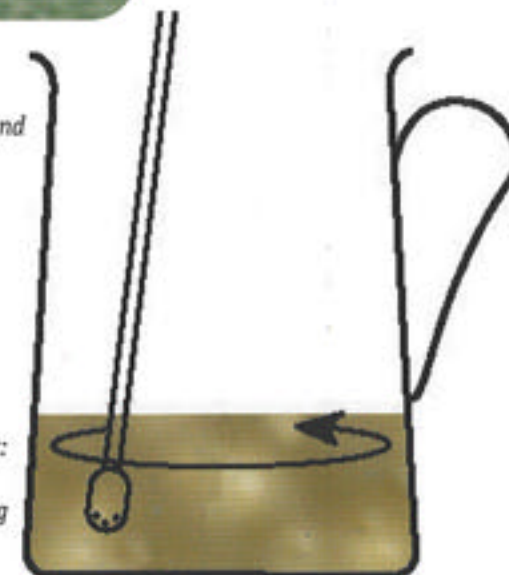
which is in part true. Drewry Pearson, MD of Marco Beverage Systems explains this succinctly, as follows.

"The concentrated Beta Lactoglobulin, the predominant whey globular protein found in bovine milk, varies throughout the year. It depends on the lactation cycle of the cow with its related hormone changes and also upon the growing season. The concentration of protein levels in the grass fed to the cow is a significant factor in the quality of your cappuccino froth. The periods of low protein production by the cow are those of early lactation (February to April) and late lactation (September to December). These are months when the milk will not give such good quality froth, but which could be improved with correct feeding."



Above:

The steam wand



Right:

The belly jug