HOT HERBS!

Many of you will have collected your herbs when they are 'hot off the press,' or straight out of the packing machine to be more precise! When they are packed straight from the machine, for collection, you can feel the heat emanating from the paper bag. We get a lot of observations at reception about the temperature of the herbs from people who have waited to collect, or have collected their herbs straight after cooking. These comments have ranged from people being happy to have something hot to hug on the bus home on a cold winter night, to queries about the cooking process and concerns about the plastic sachets. So here is a little insight into the decoction and packing process and some information about the possible dangers of leaching plastics.

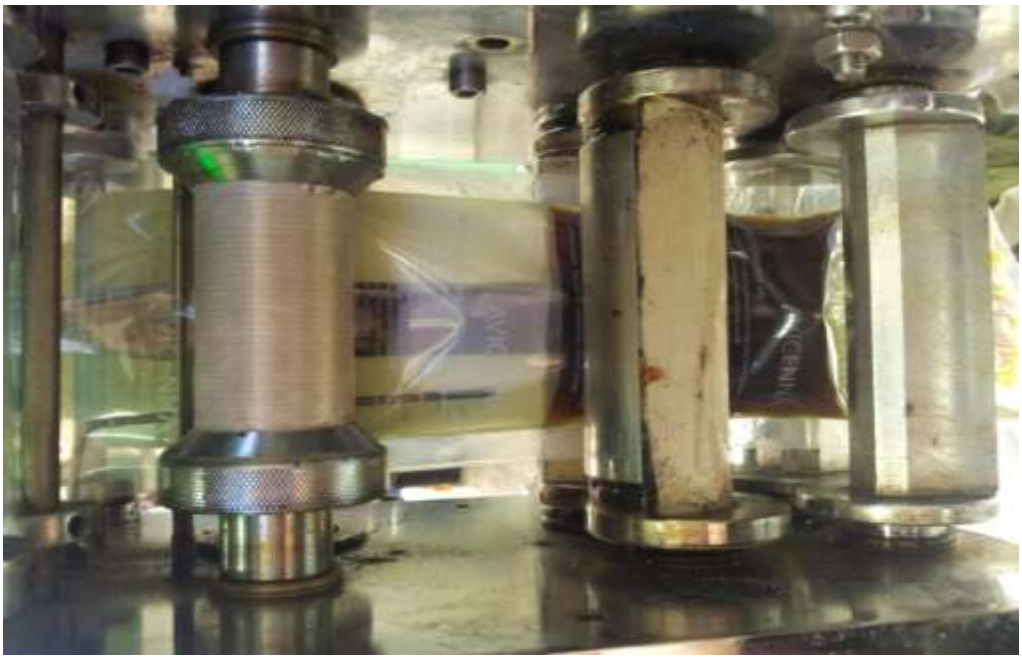
Hot herbs being packed for collection

FROM PRESCRIPTION TO PACKING

The practitioner writes the prescription which is sent to the pharmacy for costing. Once they have the go ahead, the pharmacy weigh up the herbs, thoroughly mix them and leave them to soak in a muslin bag, sometimes for an hour, sometimes overnight. They are then placed in the pressurized chamber of the decoction machine. As the chamber is completely enclosed the steam increases the pressure causing the water to boil at 125 – 130°C instead of the normal 100°C. The high pressure and temperature controlled decoction method extracts significantly higher proportions (as high as 30-40%) of the active ingredients in the herbs thereby making the formula much more powerful and efficient at enhancing the synergistic effect of the ingredients.

As Mazin puts it, “The heat applied acts as a catalyst that binds the various active ingredients together, thus forming a myriad of new substances that are literally more than the sum of the original parts. In essence a chemical reaction takes place when the herbs are cooked, and new synergistic actions between the ingredients are then produced, which is where the true magic of herbal medicine comes into play.”

Once the cooking process is complete the pressurized liquid is sent to a second machine where it is immediately vacuum packed into the sachets. Each sachet (ranging in size from 50 ml for babies and children, to 280 ml) is then preserved for up to 2-3 months with no deterioration and without the need for refrigeration.



The hot herbs being piped into the empty plastics in the packing machine

So, as well as the high cooking temperatures, the herbs also need to be sent to the packing machine whilst piping hot to ensure that a vacuum is created when they are siphoned into the empty sachets. Therein lies the mystery of the hot herbs!

PLASTIC PERILS

You may have heard of bisphenol A (BPA), a compound found in the majority of plastics, which has come under fire over the last few years due to many studies exposing its capacity to leach into foods and liquids. When exposed to high temperatures, such as microwaves. dishwashers or even boiling water the leaching increases dramatically, as much as 55 times faster.

Is BPA dangerous? There are many conflicting studies and arguments sourrounding BPA so it can be difficult to establish the real truth. The E.U.’s European Food Safety Authority and the U.S.’s Environmental Protection Agency consider levels of 50 micrograms (one millionth of a gram) per kilogram of bodyweight to be safe. A study by the U.S. Center for Disease Control found traces of BPA in all the urine samples it collected in 2004 but with safe levels ranging from 33 to 80 nanograms (one billionth of a gram).

BPA mimics estrogens in the body, binding to the same receptors as natural female hormones. Due to this, most concern over leaching BPA is regarding fetuses, infants and children, who may have higher levels of exposure and be less equipped to process it. Studies have shown that adults metabolise BPA quite rapidly and that it is expelled from the body within a couple of days. However, as we are constantly exposed to BPA there are concerns that this continuous contact, over time, may have negative effects,

Fortunately, there are alternatives to BPA-laced products if you want to take action. Essentially any plastic bottle with the plastic identification "recycle" code of 1, 2, 4, 5 or 6 is free of BPA. Number 3 and 7 plastic can often contain BPA.

Avoiding canned food is a more difficult choice. Many very healthy products, such as beans and tomatoes, come in cans, and some of these cans might contain an epoxy liner made with BPA. There's no number scheme to guide you. Buying food in glass would reduce your BPA dose.

As for salty canned soups, sauces and sugary canned drinks, you'd be better off avoiding them entirely, not because of the BPA but generally because they just don't do you any good!

OUR PLASTIC PROMISE

Back to something that is good for you . . . our herbs! You'll be pleased to know that Mazin took these factors into consideration when creating the decoction service.

Our plastic sachets are made up of three layers, the first layer which comes into direct contact with the herbs is inert up to 145°C degrees and as you've seen our herbs do not reach that temperature. The second layer is for strength, to ensure the sachets will hold and the third layer is superficial, for the logo and instructions. No leeching of the plastic occurs into the medicine and the sachets are food grade packaging and of approved standard. All our sachets are Bisphenol-A free (BPA Free), and all are classified as Plastic ID code 4.

The instructions on the outer layer of plastic

So you can continue drinking the herbs from their hot sachets, safe in the knowledge that they are doing you nothing but good and that we are doing everything possible to protect their contents and preserve that delicious flavour that we know you all love!!

The empty plastics being run through the packing machine

By Victoria Osterbery

RESOURCES

http://www.livescience.com/5487-murky-truth-leaching-plastic-bottles.html

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http://www.avicenna.co.uk/news-lifestyle/article/view/the-avicenna-centre-new-developments-in-the-practice-and-dispensing-of-chinese-medicine-1/268/

http://www.scientificamerican.com/article.cfm?id=plastic-not-fantastic-with-bisphenol-a

Our sachets:

Low density polyethylene **低密度聚乙**烯（LDPE), **代**码为LD100AC

Linear low density polyethylene, 线性低密度聚乙烯（LLDPE）**代**码为LL0220AA

Medium Linear low density polyethylene **茂金属聚乙**烯（MLLDPE） **代**码为HTA108