

Jon Derricott, Andrew Preston

Dissolving drugs Harm reduction in a sachet?

In October 2001 the authors began producing and selling single-use sachets of citric acid for injecting drug users. Here they explain why they did it, their experience to date and some of the issues that remain in the supply of acids to injectors.

Jon Derricott is a writer and trainer specialising in safer injecting and harm reduction.

Andrew Preston is a harm reduction writer, publisher and trainer.

Over the last few years reports at the national needle exchange forum, and from participants on our safer injecting courses indicated that it was becoming increasingly difficult for injecting drug users to get hold of suitable acids to prepare heroin or crack cocaine for injection. Factors behind the growing difficulty included:

- confusing advice and information to community pharmacists;
- the lack of a commercially available acid that did not involve agencies packing it themselves;
- concern that citric acid might have been directly implicated in the outbreak of heroin related deaths in 2000 (it was not – although advice should be to use the smallest possible amount of an acid to dissolve drugs as the more acid used, the greater the possibility of local tissue damage that can help any bacteria present to thrive).

We were hearing more and more anecdotal reports of injectors using inappropriate acids such as:

- lemon juice – which is associated with fungal infections leading to eyesight problems;
- vinegar – anecdotally associated with fungal infections;
- kettle de-scaler – highly acidic often containing a combination of phosphoric and citric acids. It cleans limescale out of kettles and irons, the likely damaging effect on blood vessels does not require tremendous imagination;
- boric acid; and
- tartaric acid

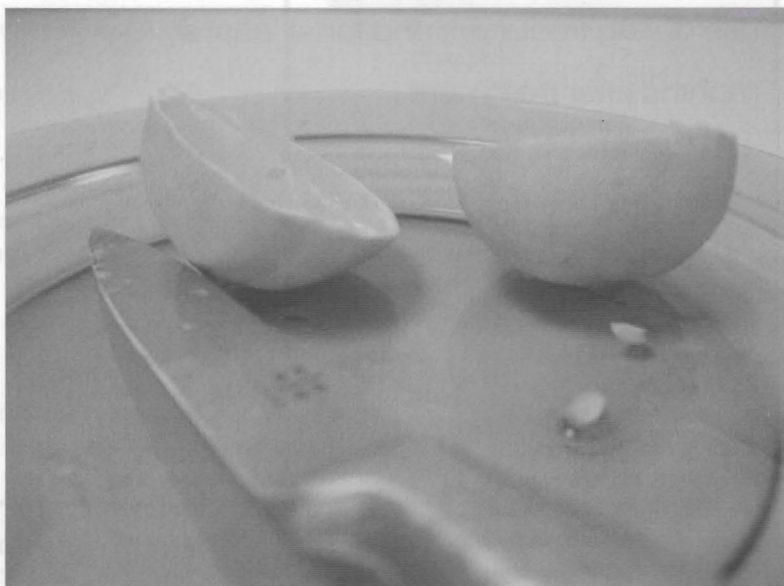
The latter two are really getting into

the area of 'experimental home chemistry' – as far as we know, no-one can say the likely results of using these acids to prepare drugs for injection, although we have heard a few reports of tartaric acid being associated with significant injecting injuries amongst crack injectors.

We had also come across some examples of agencies who had been giving the erroneous advice that clients did not need to use an acid to

regular reports from needle exchange workers on our safer injecting courses that they had clients who had suffered eyesight loss as a result of fungal infections.

We have both been running safer injecting courses for a number of years, in which we give advice on how to minimise the (already remote) possibility of agencies being prosecuted for giving out items of injecting paraphernalia alongside the



prepare drugs such as brown street heroin and crack cocaine for injection. The plain fact is that they do, as these drugs are in a form that is poorly soluble in water but eminently smokeable. They are impossible to prepare for injection without the addition of an acid. The acid converts them into a much more water-soluble salt.

Disturbingly, we began to get

needles and syringes that are allowed under the Misuse of Drugs Act. However, although some agencies had taken this advice, established agreements with local police services and begun to give out a wider range of paraphernalia, the majority had not.

We decided that we needed to be more vigorous to encourage more areas to establish local agreements

and to give out a wider range of equipment. We were considerably helped in this aim by the decision in Glasgow and Strathclyde to conduct an evaluation of distributing single use citric sachets. They were looking for a source of a suitable sachet. We were therefore able to make a large enough quantity of sachets to get economies of scale.

The early experiences

From deciding to produce citric acid sachets (more on the reasons for choosing to begin with citric rather than the equally useable ascorbic acid later) to producing the finished product took about 6 months, involving:

- sourcing suitable supplies of citric acid;
- finding companies capable of producing sachets to medical packing standards;
- testing prototype sachets with injectors to establish that they liked the idea of the product and that they contained enough powder for average use;
 - design and artwork;
 - writing an accompanying briefing paper and going through a peer review process;
 - writing a guidance leaflet for injectors; and
 - getting detailed legal advice.

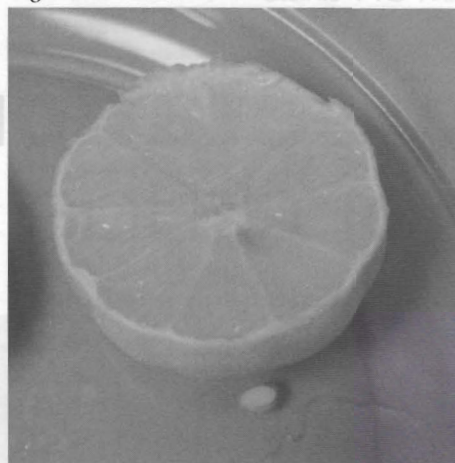
We supplied the first sachets in October 2001 and in the 5 months since, more than 25 areas are distributing citric acid sachets through needle exchanges. Most of these have established local agreements with the police. Many areas have been happy to share their experiences of obtaining local agreements with the police through our web site www.saferinjecting.org

Early reports suggest that giving out single use sachets can:

- Improve dialogue between injectors and exchanges, enabling them to better understand the realities of what people are doing.
- Increase needle exchange activity by giving an extra incentive for attendance.
- Give a continuous and strong message about the importance of using the smallest possible amount of acid.
- Help to secure the provision of injecting paraphernalia as a main-

stream activity to be written in to annual budgets.

There have only been a few negative reactions:



- In one area users have said that there is not enough citric in the sachets for an average deal. This could either be because the local deals are very generous, or there is a local culture of using an excessive amount of citric acid, or a combination of both factors.

- In another area, some (but not all) people 'speedballing' with heroin and crack have complained that they need to use two or three sachets to do this. Although it is unclear what exactly is going on in this area, giving out the sachets has helped to establish that people may be using excessive amounts of acid to prepare speedballs and has also given the agency an opportunity to pass on the PHLS advice to split the heroin and cocaine into separate injections at different sites in order to minimise the likelihood of tissue damage, as this can create ideal conditions for the growth of organisms such as *clostridium novyii* and *clostridium botulinum*.

- A couple of areas that already supplied citric acid bagged up by hand have decided not to supply the sachets on the basis of cost.

Why citric acid?

There is often an assumption that ascorbic acid (vitamin C) is a healthier alternative for drug preparation than citric acid. It is likely that people making this assumption are basing it on several factors, including the powerful association of vitamin C and health and the fact that weight for weight,

ascorbic acid is a less powerful acid than citric.

However, the 'healthy' associations of vitamin C are to do with swallowing it rather than injecting it. It is very unlikely that there are any health benefits to be had from injecting ascorbic acid. High dose intravenous ascorbic acid can lead to kidney problems as the breakdown products of ascorbic acid include oxalic acid, which is toxic to the body. In the doses used for intravenous injection of heroin or crack, this is very unlikely to be a problem, but the equation 'vitamin C = health' should certainly be questioned.

The fact that ascorbic acid is a milder acid than citric is a stronger reason for suggesting it as a better alternative. However the best advantage that can be gained in this respect is that when using ascorbic acid there is a greater 'margin for error', but, to achieve a similar effect, twice as much ascorbic as citric acid needs to be used.

When judged against the above criteria it is hard to choose one over the other.

The reasons we initially chose to produce citric acid sachets rather than ascorbic acid sachets were that:

- In the (fairly limited) canvassing of injectors that we undertook prior to production, citric was the preferred option by a factor of about 3:1 (this may be because citric can often be easier to obtain and is certainly cheaper).

- More importantly, citric acid is only available in powder form, whereas vitamin C is available in many forms including tablets and effervescent tablets. We have heard several anecdotal reports of injectors crushing tablets or attempting to use effervescent or other tablet vitamin C preparations for drug preparation. We therefore chose to promote an acid with little potential for confusion.

Some areas have indicated that they would engage in supplying acids if ascorbic sachets were available and a substantial minority of users appear to prefer it. Now that citric sachets are established, we are investigating providing ascorbic acid sachets alongside citric acid and, if the testing process does not throw up any unexpected problems will be making them available in the near future ■