



METAL SCOURERS: EFFECTIVE BUT DANGEROUS!

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Up to your elbows in grimy mess? Walls, bench tops, range hoods, stainless steel appliances, tiles and other surfaces that have a build up of oily residue can be very difficult to clean. While chemical cleaners assist with removing grime, mechanical scrubbing is almost always required.

When it's necessary to manually scrub hard surfaces in a food facility, many of us still reach for a metal scourer. Metal scourers can be made from mild steel, galvanized steel, stainless steel and even copper. They are highly abrasive, durable and easy to rinse, but food safety experts agree that metal scourers should never be used in an area where food is handled.

Interestingly, if you clean a stainless steel surface with ordinary 'steel wool', it will develop rust marks. This is due to a chemical reaction which occurs on the surface between the stainless steel and tiny fragments of carbon steel which have been left behind after cleaning. Similarly, cleaning a stainless steel surface with a sponge or brush that has previously been used to clean carbon steel causes corrosion.

Rust spots on food equipment can be a food safety problem, but fragments of metal in a food handling area are an even more serious concern. Metal scourers gradually break down during vigorous scrubbing. Loosely woven stainless scourers (as pictured) create fragments which can be one or two centimeters in length with sharp edges and ends. The fragments are often curved or hook-shaped. A few minutes of scrubbing with a stainless scourer can result in hundreds of fragments being produced.

Small fragments of material in food handling areas can, and do, find their way into food. Metal detectors, X-ray equipment and magnetic separation devices should not be relied upon for detecting or removing small contaminants, particularly wire-

shaped pieces which may be oriented in the food such that only a small area presents to the detecting device.

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Metal fragments in food can cause mouth injuries, and if swallowed, can lodge in the stomach, small intestine or large intestine. Once inside they have the potential to perforate the wall of the digestive tract. A perforated stomach or intestine allows intestinal juices laden with bacteria to enter the peritoneal space causing an infection known as peritonitis. Untreated peritonitis is a serious condition, which if not treated will result in a painful death within a matter of days.

Alternatives to metal scourers are available. Non-metal scourers are usually made from nylon fibres coated in abrasives. Light, medium and heavy duty scourers offer a range of scouring attributes and open-mesh models provide good rinse characteristics.

Like metal scourers, nylon scourers also release fragments during vigorous scrubbing, however these pieces are typically much smaller than stainless steel scourer fragments, and tend to be straighter. Although the pieces may be rough, they have no sharp edges, so they are less likely to cause injury to the mouth or digestive tract. Nylon is an extremely inert material, and if ingested is thought to pass through the body without causing harm.

There are a number of certified food-safe scouring products which are effective and have been closely examined in terms of their risk profile. They are a safer alternative to metal scourers. Avoid the risk – your consumers will thank you. ■