



Does drinking milk protect you from welding fume?

Fact or Fiction

There will be two types of welders reading this article. The first will think this is a joke. That no one could seriously believe that milk would be a suitable shield against a now known carcinogen. The other has heard from their peers that drinking milk does protect them from welding fume and wants to know whether there is any truth to this tale. Below, we look into facts and give you the answers once and for all.

Drinking milk to protect you from welding fume

The first concept is that after drinking milk, the body will absorb the calcium from the milk and this will "fill up" the spaces that other heavy metals like zinc and cadmium would otherwise fill. By filling these gaps, the welder lowers the potential intake of these heavy metals.

While the body will absorb calcium, this process relies on the digestion system pathway NOT the respiratory system. Therefore, the heavy metals that make their way into the respiratory pathway by breathing in welding fume are in no way affected by the intake of milk through the digestion system. Furthermore, a healthy diet means there should be no calcium deficiency, so the extra calcium in the milk will not be absorbed (or very little).

Holding milk in the mouth while welding acts as a filter

The other theory is that welders would hold the milk in their mouth while welding. After welding they would spit the now dirty milk out! Trying to use it as a scrubber solution.

The whole notion is wrong. Holding the milk in your mouth forces the welder to breathe through their nose. Again, this process relies on the respiratory system with the welding fume being transported to the welder's lungs. Clearly a respirator worn and used correctly will be more effective at preventing the welding fumes from getting into the welders' airways to start with, rather than attempting to do something after the fumes have already entered the body.

So how should welders protect themselves from welding fume?

The 3M Speedglas 9100 Welding Powered Air Purifying Respirators (PAPR) give welders a required minimum protection factor of 50. This means that the air the welder breathes when using a PAPR welding helmet will be 50 times cleaner than an unprotected welder. This is 5 times the level of protection offered by a properly fitted and tested disposable or reusable respirator. To learn more about how to protect yourself from welding fume please visit our resources below or download our free Welding Fume White Paper which takes a closer look at the recent reclassification of welding fume as a Group 1 Carcinogen.

Visit our range of Welding Helmets with Powered Air

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