

## QUALITY MATTERS

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### It's tidy-up time for CONVERSION FACTORS

We are upgrading our documents and are revisiting the myriad conversion factors that are applied to various analytes/ drugs/ proteins, etc. An example would be a lab reporting Folate on our IA programme in ng/ml. We convert that to nmol/l using a multiplication factor of x 2.265. That's an easy one. The problem ones are as follows:

**PROLACTIN.** We currently convert ng/ml to uU/ml by multiplying by 21.2. I cannot find this factor anywhere in the literature and would like someone to please confirm it is correct, or give me another one. Source documentation required please – no opinions!

**GROWTH HORMONE (GH).** This is difficult too as my reading has turned up the fact that there are two distinct International Standards (IS) in use and they cannot be interconverted. However, we currently use 2.67 to convert ng/ml to uU/ml. Again, no sign of this anywhere but I have found an article that states the conversion factor should be 3.0. We will change to this unless some bright spark can send documentation showing otherwise.

**METHOTREXATE.** We convert µg/ml to µmol/l by multiplying by 0.001. Why? I have absolutely no idea. All help appreciated.

**DHEAS.** We currently convert mg/dl to µmol/l using 27.1, but Tietz states this should be 26. We will change unless some evidence suggests otherwise.

Some small changes will take place as follows, to fall into line with factors documented in Tietz, Eastham, Hallworth & Capps, etc,

**Amikacin.** Mg/l to µmol/l is currently 1.7076 and will change to 1.71.

**Caffeine.** µg/ml to µmol/l. the current factor of 5.0 will change to 5.15.

**Ethosuxamide.** From µg/dl to µmol/l will change from 7.049 to 7.08.

**Tobramycin.** The factor of 2.137 for converting µg/ml to µmol/l will change to 2.14,

**Vancomycin.** mg/l is converted to µmol/l using a factor of 0.6731 and this will change to 0.67.

Some factors in current use have come from labs who requested that we employ the factors mentioned in package inserts. If this applies to your lab, please send us all relevant documentation, in fact anything that might throw some light on this dark and multi-factorial world.

### Power out-for-ages

Eskom have published schedules for us to know when we will be cut off from the national grid. This is helpful, or would be if they stuck to it. Sadly, we seem to be having unscheduled power cuts on days when we should be connected. Please bear with us if you phone or try to send a fax and cannot get through. Our office does have a generator but even that is becoming exhausted with the extended effort. And those dips in power, as those of us getting older know only too well, can be painful and unnerving. But, we will get through it and, think of the positive – our electricity bills will be lower than ever this winter. We may freeze but we will save money.

Seriously, we should lose power every Tuesday between ten and four, so try making contact during any other period and you might get luckier.

### Food Microbiology EQA

This EQA / PT continues to grow. It has almost 30 participants and is now quite well developed. Our next stage is to take all the helpful comments we have received and compile a new version of the report, to bring it into line with all our other programmes. One that we have been asked about several times is: can we give a firm indication that a bacterial count is “correct” rather than just list all counts received from labs. This is a good idea and it will be incorporated into the new version as soon as possible. Thanks to all those whose suggestions have helped make this a better EQA/ PT than ever before.

### Haematology Reports

We have removed the Levey-Jennings Chart that shows overall statistical information. It has been replaced by a legend that states clearly that your Instrument Performance statistics must be used for quality purposes. We hope this is clear enough for you – and the SANAS assessment team! Please note that we still report the actual statistics for Overall Performance, just in case you need it. We will be sending a notice to all laboratories and QA Managers / Departments.

### Diff Slides Cycle 31

We had 877 comments on diff slide quality during this cycle and 47 said they were poor. That means we had 5.4% poor slides during this cycle, much the same as before. And I've checked this calculation six times now, so it better be correct.....

By Dr Jim McCulloch