About pharmaconutrology

https://medicationsandnutrition.online/resources/

The field that had no name

Ology means the study of. For example, psychology is about the mind.

The interface between prescribed medicines and nutritional factors is so overlooked or disregarded that it is a "field without a name". To address this oversight, we have long debated between 2 worthwhile field names, being pharmaconutrition and mediconutrition. We ultimately decided mediconutrition may be interpreted as "medicine in relation to doctors" rather than "medicine as a pharmaceutical", so chose **Pharmaconutrition** as being an appropriate field name. **Pharmaconutrology** is therefore about the nutritional consequences of pharmaceuticals in biological systems (in this case human bodies); specialists would become pharmaconutrologists.

Why is pharmaconutrition overlooked?

Pharmaconutrition interactions are overlooked because -

- research papers are scattered across a plethora of journals and subjects, and realistically busy clinicians don't have the time to pull together the evidence,
- the studies are mostly small,
- there is an assumption that food intake will cover the drug-induced nutrient losses - there is no evidence to support this assumption,
- there has also been an assumption by the pharmaceutical sector that food is benign – this assumption is steadily being eroded,
- doctors and pharmacists do not learn about nutrition during their training which is surprising given 80+% of western ill-health has an underlying negative nutrition component. The international journals periodically acknowledge this deficit and call for it to be addressed, however the calls continue to fall on deaf ears.

Who will do the research?

That many of the studies are small is a valid point however who will do the research? There is a noticeable lack of contenders:

- **pharmaceutical industry.** There are no regulatory requirements for the negative nutritional impacts of pharmaceutical products to be included in the adverse reactions component of their product discovery process and documentation;
- **governmental research bodies.** The number of similarly worthwhile research projects competing for funding is steadily increasing whilst the funding source(s) is/are generally not;
- **philanthropic bodies.** Many philanthropic bodies support a specific area of research and become significant supporters of that research, whilst others dispense smaller grants to a larger number of applicants; sadly, there aren't any philanthropic bodies with a particular interest in this area of expertise.

The two components of pharmaconutrition

There are 2 components to interactions between medications and nutrition -

- accessing the information, and
- presenting the findings in a clinically meaningful format.

Accessing the information. The online platform **Medications & Nutrition** provides a comprehensive range of clinically-useful research evidence that is presented in a dot point format to improve accessibility to the latest research for busy clinicians. The alternative is to trawl through a plethora of journals to find the information – and that has a very high time cost which most clinicians cannot afford.

Presenting the findings. How does one present the information so that it is useful to all care providers? Through trial and error, we have found that:

- a table is great for presenting summary information such the various different side effects (nausea, vomiting, etc) and nutrients affected (B12, Mg, Ca, Fe, etc),
- actually identifying individual impacts. For example, the wound healing cascade increases the requirements for several nutrients during the healing process. If a number of prescribed medicines negatively impact the status of one or more of the necessary nutrients then healing can be delayed.

Ultimately this portal is about addressing both of the above identified components by providing resources to both easily accessible information and how to apply it in a clinically-meaningful format.

Fortunately change is coming …

Some of the oversight is starting to change primarily because there is a lot of pharmaceutical research into the use of physiological transporters to deliver drugs to currently inaccessible bits of the body; the primary role of these transporters is to deliver nutrients to required areas. The early research shows that many of the currently researched drugs either inhibit the transporters or can be transported by them – both these scenarios mean nutrient displacement. Until this recent research there was no awareness of this degree of interference with nutritional factors.

Nutrients are typically absorbed during the meal as food is digested and nutrients released, whilst drugs are commonly administered before meals to improve their absorption, therefore drugs access the transporters before the nutrients and it is unlikely this potential nutrient deficit will be compensated.

Chronic, sustained medication intake can be for years and decades therefore a sustained interference with nutrient availability will result in mal-nutrition and cascading consequences including poor responses to treatment (which we probably already see and don't recognize as such).

As most of the research is conducted by pharmaceutical companies, and published in pharmaceutical journals, it is likely pharmacists will become aware of the implications of this research and have the potential to become significant drivers of change, primarily through advising the prescribing doctors of negative interactions. However, given their lack of nutrition knowledge it is also likely they will overlook this negative impact on nutritional factors. Therefore, the most likely drivers of change will be the nutrition clinicians.

Currently farsighted, visionary clinicians are already integrating this evidence into their clinical practice.

Whilst the nutritional adequacy of the food we eat is questioned by many, who questions the nutritional consequences of the pills we are prescribed?

Pharmaconutrition is the junction between nutrition and pharmaceuticals