

DRIPLINE



PNDU

Parenteral Nutrition Down Under

Our first issue for 2022 sadly includes farewelling one of our members, Tracie, who lost her battle with her health in February; she will be missed. Our articles include information about this year's AuSPEN consumer workshop and PNDU social gathering in November; learning about the importance of vitamin D in our diet; learning about 4 of our members' hobbies and interests, who are still 'living their best life' on HPN; learning of possible adjustments to our HPN regime that may facilitate holidays; and more. I hope you enjoy learning about these various aspects of life on HPN.



Regards,
Gillian
Dripline Editor

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By Gillian

It is with great sadness that PNDU farewells one of our members, Tracie, who died in February after a long fight with poor health. Tracie was always inspiring on our forum; even when telling us of her latest hospital stay, she never complained; she just seemed to accept that that was her life at the moment. When I asked members to contribute to a Dripline article, Tracie would provide something – including sharing one of her hospital-stay activities of painting by numbers! When PNDU needed more help with the Management Committee, Tracie volunteered, including being willing to train as our treasurer. Sadly, despite holding this role for many months, Tracie’s poor health meant that she was unable to fulfil this role. Tracie will be remembered by our members, and missed.

In Memoriam

PNDU remembers past HPNers

Over the years, PNDU has been reminded of the fragility of life, especially for those with Intestinal Failure. Sadly, PNDU has shared with family and friends in saying good-bye to these precious loved ones who have passed away, but who have also left wonderful memories of love, strength and courage.



Tracie - 5 February 2022, aged 47 years
Aidan – 21 May 2020, aged 14 1/2 years
Lara – 24 April 2020, aged 37 years
James – 9 November 2019, aged 28 years
Elise – 19 August 2019, aged 43 years
Ross – 23 January 2019, aged 67 years
Celena – 27 November 2017, aged 43 years
Emma – 9 April 2017, aged 35 years
Lara – 16 February 2017, aged 7 years
Teresa – 15 February 2017 aged 58 years
Natalie – 18 September 2016, aged 27 years
Sam – 13 September 2016, aged 14 years
Carol – 2 September 2016, aged 67 years
Jessica – 24 January 2014, aged 20 years
Tynesha Rose – 29 October 2012, aged 5 years
Aria – 20 June 2011, aged 5 years
Pauline – 29 April 2011, aged 38 years
Hebe – 3 January 2008, aged 2½ years



May the cherished memories of these dear ones
never fade

Original images by [Pneumobear](#) and [flowers](#)



We hope to welcome as many HPNers and their Carers as possible at these two wonderful 'Free of Charge' events.

Save the Date for PNDU Social Gathering: - Venue, date and time to be confirmed; probably Saturday afternoon, 19th

PNDU invites all our HPN members, family and carers who are able to join us in Melbourne, to come along to a social gathering, meet with other HPNers and carers in a relaxed friendly atmosphere, exchange stories of life on HPN with other HPNers who really understand your journey. Learn more about PNDU and what we do for you.

More information and details on how to register *will be provided in the July edition of Dripline Save the Date for AuSPEN HPN Consumer Workshop.*

Date: Thursday 17th November. Venue and time to be confirmed, but it will also be live streamed.

We are very grateful that AuSPEN has organised another HPN Consumer Workshop, specifically for HPNers and their carers.

The AuSPEN HPN Consumer Workshop is a unique opportunity to learn more about your HPN from expert clinicians working in the field. This event is open to all adult HPNers, their carers and adult carers of children on HPN only.

Details on how to Register will be advised at a later date.

PNDU Travel Sponsorship to attend these two events in Melbourne

PNDU will offer Two Travel Sponsorships, to the value of \$600 each, to assist HPNers and Carers attend these events. Priority will be given to PNDU members who haven't before attended an AuSPEN HPN consumer workshop plus the PNDU Annual social Gathering. If you have attended past events, you can still apply again. If you're not yet a PNDU member, complete the membership form on our website today.

(One sponsorship per family, travel must be completed and receipts forwarded to PNDU before reimbursement can be made).

More information and details on how to apply *will be provided in the July edition of Dripline Winners announced 1st September.*



Editor's Note: one of our members, a founding member, Jacqueline, suggested that it would be lovely to hear from fellow members about what they enjoy doing in their life, rather than just hearing about their illness or HPN problems - just some information that opens a little of our member's lives, that may inspire others, or start a conversation. Here are 4 members responses.

Jacqueline

I've loved steam trains since I was a child in the UK and watched them go past on their summer trips. But David is Kenyan and steam trains were their mode of transport, so he rode them regularly...lucky him. We've both been very interested in trains and have collected many HO scale rolling stock etc. Some date back to our childhood.

About 10 years ago, I decided to build a larger HO layout, which has been extended twice to its final size of 6m x 1.6m. It can't be extended any larger as it's a purpose-built shed that can't be extended. I constructed all buildings, topography, roads, and scenery. David is responsible for the technical aspects such as electrics, track layout and signalling.

When we recently moved to our new house, we joined the local Steam and Light Rail Society, which is literally 'just up the road'. The track is 1km long and has 5inch and 7 1/4inch track. Both sizes are for ride ability and pull carriages carrying at least 8 people. Our club has several trains, also most of our members own at least one train each. These include electric, petrol and true steam engines. Most of these are privately built by hand.

It wasn't long before we decided to buy our own. We have a 5" and 7 1/4", one being electric and the other petrol; both carry passengers as well as the driver. Public running every Sunday gives us the opportunity to run our own trains or drive the club ones. After training, members act as station master, guard or driver. Tasmania has at least 9 public and private tracks, most of which we've visited with our trains for 'meets'. At these events we get to meet many very enthusiastic train buffs, most of whom have built their own moving and rolling stock.

We've had to adapt our trailer for transporting the larger train and bum car as they weigh 350kg and manually lifting it onto the trailer isn't an option. The smaller train is also too heavy to lift, but we now have a roller to roll it into the purpose-built track in the rear of the car.

Our son and daughter in law are also train enthusiasts and he and David have purchased an electric 5inch partly completed freight train which they plan to finish together. That means he doesn't need to borrow ours!

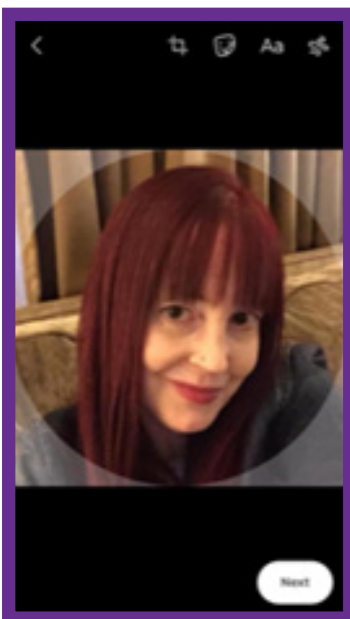
We enjoy having the same interest as each other as it makes it easier to explain why you just bought more train stuff.



Jacqueline enjoying one of their ride-ons; Jacqueline's amazing creativity shown in her construction of their model train layout. Electrics and signalling done by her husband, David.



Lisa



I'm a mum of four, guardian to three and grandma to 2. At 45, I recently completed my Bachelor of Social Science Psychology degree online. I found most of the criminology electives the most interesting, so I decided to further my studies and do a graduate diploma in Forensic Behavioural Science, hoping to then go onto masters and possibly PHD. Although I've had a lot of health issues hold me back, I've found redirecting my thoughts and using my brain has helped me in so many ways.

I'd like to believe I could enter the field under a disability application, but if I am not able to health wise, that's okay, because there is a lot you can do using your mind and knowledge from behind a computer screen. You really don't need to be 'out in the field' with work anymore, or based at an office. My passion is the rehabilitation of young offenders and education of police and custodial officers with regards to the implementation of rehabilitative programs for young offenders.

It's probably the one thing that helped me the most when I've been sick in hospital or weak and at home. Study takes my mind somewhere else and can be used for so much good!

I'd recommend study to anyone who has been unable to continue their career, or who feels they don't have a purpose (other than feeling pretty unwell a lot of the time) to consider online education. You can even begin at certificate or diploma level in an area that interests you; it doesn't have to be for a career, it can simply be for your enjoyment. be for your enjoyment.

Jane

I paint, oil and acrylic landscapes, mostly.

I collect minerals.

Also, keys and locks.

I love gardening and knitting.

I started painting about 20 years ago. Gardening has been in my blood forever.

I got interested in minerals about 8 years ago, keys about 50 years ago.

I started knitting when I was about 15. My knitting days are numbered due to rheumatoid arthritis...I'm very slow now!

But I persevere.

I am a volunteer at the San hospital when COVID permits visiting patients on the wards. That has been for 12 years now.

Nowadays, I spend an hour or so doing mental exercises for my Parkinson's as well as physical exercises for Parkinson's and Osteopenia.

I have been on HPN for 22 years

Laura

Amongst other hobbies, I'm a bear maker. I started with a wonky calico bear called Murray; one of the teachers at my primary school was a bear maker and either incredibly dedicated to her craft, a glutton for punishment (or both), as she had every grade 6 student make their own graduation bear. Lots of years later, I'm still making bears - thankfully with much more skill. I exhibit some, I've won a few blue ribbons over the years (currently wracking my brains on a Melbourne show entry for this year; I won the blue last time the Show was on - now I have a standard to maintain!). I make some to sell, some to gift, and a lot on commission - particularly memory & keepsake bears - where people send me clothing of loved ones who've died, and I either make a bear from the clothing or incorporate it into a more traditional style plush or mohair bear in some way. This can get quite emotional - but also a huge privilege to have a total stranger's trust with such personal and sentimental items.





Bianca Mammana, APD

Senior ICU and TPN Dietitian, Sir Charles Gairdner Hospital

Editor's Note: PNDU is very grateful to AuSPEN for providing this very informative article.

Introduction

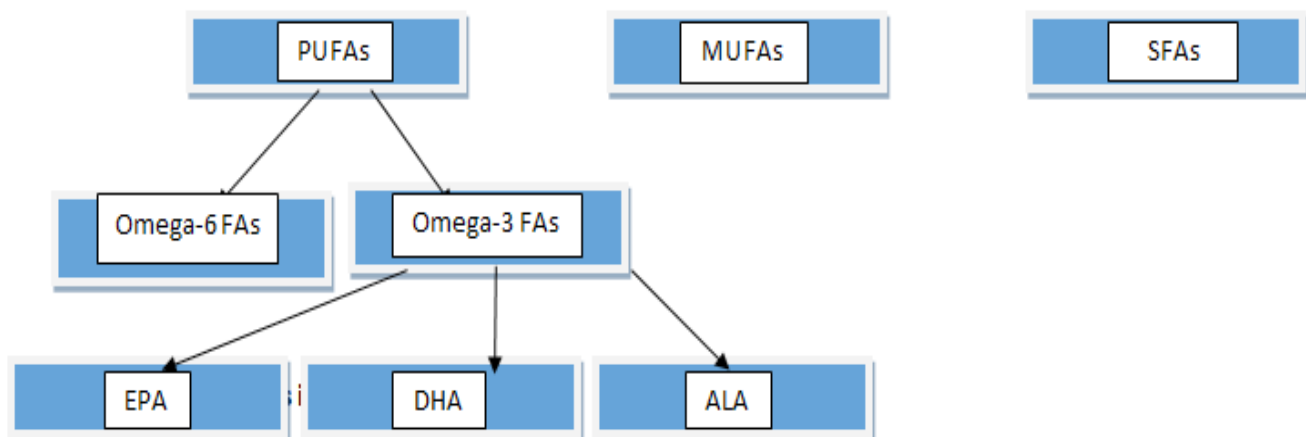
Lipids, also known as 'fats,' are an important part of balanced parenteral nutrition (PN). Mixtures of different types of lipids have now become widely available and the use of lipids has greatly evolved over time from the traditional intravenous lipid emulsions (IVLEs) containing only soybean oil to those containing:

- a mixture of soybean oil and olive oil (eg ClinOleic® – Baxter)
- a mixture of soybean oil, olive oil, fish oil and medium chain triglycerides (MCTs) from coconut oil (eg SMOlipid® - Fresenius Kabi; Finomel® - Baxter)
- and fish oil only (eg Omegavan® - Fresenius Kabi)

Types of fatty acids

IVLEs contain different fatty acids (FAs). The three different types of FAs include polyunsaturated fatty acids (PUFAs), monounsaturated fatty acids (MUFAs) and saturated fatty acids (SFAs). The two major classes of PUFAs are the omega-3 fatty acids and the omega 6-fatty acids. You have probably heard about omega-3 fatty acids. The three main omega-3 fatty acids are eicosapentaenoic acid (EPA), docosahexanenoic acid (DHA) and alpha-linoleic acid (ALA). Omega-3 fatty acids are present in certain foods such as vegetable oils, nuts, flaxseed and fish as well as dietary supplements like fish oil, and they are reported to have a variety of health benefits.

Chart 1 outlines the types of FAs.



Fatty acids in PN solutions

The first generation IVLE soybean oil contained high levels of omega-6 PUFAs and low levels of omega-3 PUFAs. It is thought omega-6 PUFAs might be "proinflammatory", while MCTs and olive oil less inflammatory, and fish oils were considered being the least inflammatory and possibly even "anti-inflammatory". Many studies have been published, comparing PN with fish oil to PN without fish oil and what health benefits these may have. So, are fish oils a friend or foe in PN?

What health conditions have PN fish oils been studied in?

PN fish oils have been explored in a variety of conditions that have an exaggerated inflammatory response, including:

- cancer
- sepsis (a serious condition that occurs when the body responds to harmful microorganisms in the blood or other tissues)
- pancreatitis (inflammation of the pancreas)
- respiratory syndromes
- major abdominal surgery

Health benefits of PN fish oils?

PN solutions with fish oils are safe and generally well tolerated. Some of the health advantages reported in studies of PN solutions with fish oils, compared to PN solutions without fish oils include:

- less infections
- shorter hospital stays
- less inflammation
- liver protective effects

These health benefits have been found mainly in those undergoing surgery.

Controversies of PN fish oils?

Health benefits of fish oils in PN solutions have been reported by recent systematic reviews, meta-analyses and expert opinion statements. However, there are few large randomised controlled trials (considered to be the best type and most accurate of studies), that compare fish oils to mixed IVLEs. Many studies have instead compared fish oils to soybean oil only PN solutions. It is clear that fish oils in PN are far superior to soybean oil only solutions, but some argue that more evidence is needed to make a recommendation of fish oil PN solutions over mixed oil PN solutions containing soybean oil and olive oil/MCTs.

Summary

Some hospitals now have a fish oil containing PN solution available in addition to a mixed oil PN solution containing soybean oil and olive oil for use in surgical and critically ill patients as well as some home PN patients and those with very abnormal liver function. As fish oil PN solutions are safe and guidelines from experts have recommended using PN formulas enriched with fish oils in certain adult groups, fish oil PN can be considered a friend!

SMOFlipid® and ClinOleic® may both be considered for use in adult HPN patients. Every person has different needs and your team will work out the best type of PN formula and the best type and amount of IVLE for you.

Sources:

Manpreet S, Mundi MD, Sara LB et al. Clinical application of fish-oil intravenous lipid emulsion in adult home parenteral nutrition patients. *Nutrition in Clinical Practice*. 2021; 36 (4): 839-852.

Lorenzo P, Konstantin M, Stanislaw K et al. w-3 Fatty-acid enriched parenteral nutrition in hospitalized patients: systematic review with meta-analysis and trial sequential analysis. *Journal of Parenteral and Enteral Nutrition*. 2020; 44 (1): 44-57.

Konstantin M, Stanislaw K, Abelardo G et al. Lipid use in hospitalized adults requiring parenteral nutrition. *Journal of Parenteral and Enteral Nutrition*. 2020; 44 (S1); S28-S38.



By Prof Gil Hardy (PNDU Life Member)

Editor's Note: In this article, Prof Hardy gives some statistics for levels of vitamin D that should be attained daily. He notes that some people will need vitamin supplements. By no means should people decide to add any supplements to their diet without discussing the issue with their hospital team. If you are concerned about your vitamin D levels, you could discuss this article with them.

Vitamin D (or cholecalciferol) is essential for bone health. It helps to regulate the amount of calcium and phosphate in the body. These important minerals are needed to keep bones, teeth and muscles healthy. A lack of vitamin D can lead to bone deformities such as rickets in children, and bone pain caused by a condition called osteomalacia in adults. Metabolic bone disease (MBD) is the most common complication for chronic intestinal failure patients on long term/HPN. Hence, because a significant proportion of Australians and New Zealanders have low levels of vitamin D, at least for part of the year, AuSPEN regards the vitamin as the most vulnerable for Australasian Home PNs.

Good sources of vitamin D

The body creates vitamin D from direct sunlight on the skin when outdoors. In the southern hemisphere, from about late October to the end of April, most people should be able to make all the vitamin D they need from sunlight. But between April and early October we do not make enough vitamin D from sunlight. Consequently, these seasonal variations must be considered when interpreting blood levels.

Natural sources of Vitamin D include some foods, including oily fish, such as salmon, sardines, herring and mackerel, red meat, liver, egg yolks and some mushrooms. Some fat spreads and breakfast cereals are fortified with vitamins and vitamin D dietary supplements are also available.

How much vitamin D do we need?

Vitamin D deficiency is defined as a plasma concentration of less than 50 nmol/L and can affect up to 40% of some populations. However, inflammation (with CRP greater than 40 mg/L) significantly decreases blood levels and complicates interpretation. Consequently, most authorities advocate considering low plasma levels together with clinical signs and symptoms when determining if an individual is deficient.

The most recent ESPEN guidelines support the Institute of Medicine (IOM) recommendation for a daily oral intake of 600-800 IU (15-20mcg). Those at risk of vitamin D deficiency may require doses up to 4000IU (100mcg/d) and much higher intramuscular doses of 50,000 IU (1250mcg) cholecalciferol may be necessary when a deficiency is unresponsive to oral supplementation, such as in the treatment of secondary hypoparathyroidism that can develop in long term PN. However this requires careful monitoring to avoid anticoagulation complications or infection risk. For those on partial PN eg when weaning onto EN, oral supplementation should be considered.

NB. A mcg is 1,000 times smaller than a milligram (mg) and is often referred to by the Greek symbol μg . Scientifically vitamin D is expressed as International Units (IU). 1 mcg of vitamin D is equal to 40 IU. eg. 10 mcg of vitamin D is equal to 400 IU. Serum or plasma levels are determined as 25-hydroxyvitamin D (25-OHD) and expressed as nanomoles per litre (nmol/L). eg. 50ng/ml is equal to 125nmol/L

Why and When should we take a vitamin D supplement?

During the autumn and winter, we need to obtain vitamin D from our diet because the sun is not strong enough for the body to make vitamin D. People at risk of not getting enough vitamin D need a daily supplement throughout the year. However, since it is difficult for some people to get enough vitamin D from food alone, everyone (including pregnant and breastfeeding women) should consider taking a daily supplement containing 10 micrograms of vitamin D during the autumn and winter.

AuSPEN recommends routine PN supplementation with 200IU (5.5 mcg)/d for adults, but long term HPNers living in NZ and southern regions of Australia may require additional parenteral, intramuscular or oral supplementation. Parenteral multivitamin products provide 200IU per ampoule.

People at risk of vitamin D deficiency

Some people will not make enough vitamin D from sunlight because they have very little or no sunshine exposure. These include those who:

- Are not often outdoors eg, if frail or housebound
- Are in an institution like a care home
- Usually wear clothes that cover up most of their skin when outdoors
- African, African-Caribbean or south Asian ethnicities with dark skin
- IF/HPN patients

Most clinical guidelines and ministries of health recommend that vitamin status should be monitored in all at-risk patients and everyone in these categories should take a daily supplement of vitamin D throughout the year.

AuSPEN advocates measurement of Serum 25OHD annually, in conjunction with serum concentrations of calcium, magnesium, phosphate and serum parathyroid hormone in long-term/home PN

Advice for infants and young children

Babies from birth to 1 year of age should have a daily supplement containing 8.5 to 10 mg of vitamin D throughout the year if they are breastfed. Infant formulas are fortified with vitamin D, but supplementation may be advisable if feeding less than 500ml of infant formula a day.

Vitamin D supplements or vitamin drops containing vitamin D (for under 5s) can be obtained from most pharmacies and supermarkets. Some women and children may qualify for free vitamin D supplements. The ESPGHAN/ESPEN guidelines for paediatric PN recommend: preterm infants should receive 80-400IU/kg/day; infants up to 1 year 40-150IU/kg/day and older children 400-600 IU/day.

Can we take too much vitamin D?

You cannot overdose on vitamin D through exposure to sunlight. But always remember to cover up or protect your skin if you're out in the sun for long periods to reduce the risk of skin damage and skin cancer. Taking too many vitamin D supplements over a long period of time can cause too much calcium to build up in the body (hypercalcaemia and hypercalcuria). This can weaken the bones and damage the kidneys and the heart. Symptoms include dizziness and kidney failure.

A daily oral supplement of 10 mcg a day will be enough for most people. Do not take more than 100 micrograms (4,000 IU) of vitamin D a day as it could be harmful. This applies to adults, including pregnant and breastfeeding women and the elderly, and children aged 11 to 17 years. Children aged 1 to 10 years should not have more than 50 mcg (2,000 IU) a day. Infants under 12 months should not have more than

25 mcg (1,000 IU) a day.

Some people have a medical condition that means they may not be able to safely take the recommended daily amount of vitamin D. If your doctor has recommended you take a different amount of vitamin D, you should follow their advice.

In Summary:

1. ESPEN recommends that vitamin D status shall be determined in ALL patients considered at risk of vitamin D depletion or deficiency
2. AuSPEN recommends that all short and long term PN patients should routinely receive 200IU (5.5mcg) vitamin D per day
3. All authorities recommend that serum 25-OHD levels of HPNers should be monitored annually

For information

There have been some reports about vitamin D reducing the risk of coronavirus (COVID-19). But there is currently not enough evidence to support taking vitamin D solely to prevent or treat COVID-19.

Prof Gil Hardy April 2022

A Day in the Life of an HPNer – adjusting PN during holidays



Words by Gillian

You've decided that it's time to take a break and head off for a holiday. For in depth information, particularly if you are planning an overseas trip, PNDU's 'Travelling with Parenteral Nutrition' information booklet is invaluable. This article is simply meant to be a quick reference to cover some possible contingencies. These are all situations that I have had to think about and discuss with my hospital team over the past 16 years since I've been on HPN.

The first step when planning a holiday, is to run it past your hospital team, and if they feel it's suitable for you to do, then send an email, via your hospital team, to your PN provider, outlining where and when you plan to be, so they can check that deliveries are possible to these addresses. If not, you might have to completely change your plans, but sometimes thinking outside the box can provide possible solutions. Make sure you start these preparations several weeks ahead of your planned departure date, in case changes have to be made.

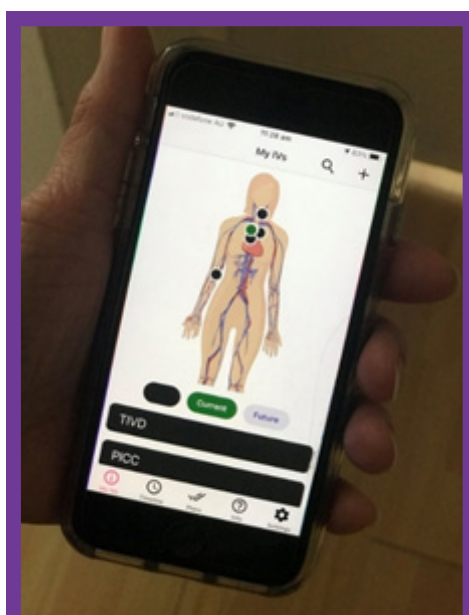
Some possible problems and solutions (dependent on whether or not your PN supplier can accommodate your holiday needs):

- Ideally, you'll be able to continue to receive your weekly PN supplies on your usual day. Try to head off on your holiday after a delivery, and return the day before a delivery. I have a plug-in car fridge that will hold 4 of my PN bags, so, because my delivery day is Tuesday, and I can leave one pack out of the fridge for use that night, this limits me to heading off for my holidays on a Thursday at the earliest, and returning by a Monday night at the latest. If you can't arrange this for some reason, ask if you can have a split delivery that week(s), getting some of your bags one day at a particular address, and the remainder later in the week at another address.

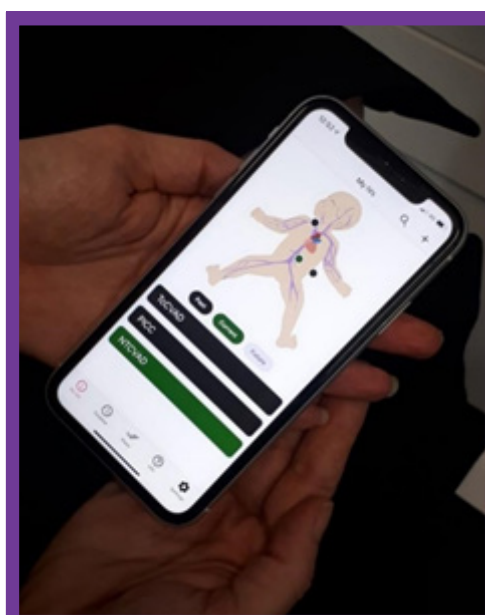
- Remember, your holiday needs to be planned around keeping your PN bags properly chilled, and this can occasionally present problems. A few years ago, I did a 7-night bus trip with my father to Alice Springs and Uluru, which meant that I couldn't get my PN in a fridge after it was delivered to the resort (room fridges too small). After discussing the problem with my team, I discovered that there is a type of generic PN (ie not formulated for me specifically, like my usual PN) that has 3 separate vertical chambers which get mixed when setting up, but which don't need refrigerating. For a short holiday, it was decided that this would be suitable for me to use. (As we are all individuals, some HPNers might not be able to use this.)
- As the holiday mentioned above commenced mid-week, I also had to adjust my usual home delivery, so that I only received a few bags before departure, and then a few less in the next home delivery, as well as the 7 needed for my holiday delivered to the resort, so that over the time, I ended up with the correct numbers of bags all told.
- Another couple of times, I've arranged to have one or two long-life bags delivered with my usual delivery before I depart, to cover a day or two after I return, because a delivery isn't possible when I need it. This has happened when I have flown home from a holiday on the weekend. I don't want to fly with the PN bags, partly due to the weight and partly due to the need for refrigeration. As I can't have my PN delivered until Tuesday, as it is compounded on Monday, having pre-arranged to have the long-life bags means that I have bags waiting at home in my fridge. Long-life bags are able to be kept in the fridge for up to a month, so for a week or two's holiday, it's a perfect solution. The really important thing with this solution is to carefully check the expiry date so you don't mix it up with regular PN bags! Again, this might not be suitable for everyone.
- Another time, my husband and I wanted to hike along the Queen Charlotte track in New Zealand for one day, then spend the night at a lodge, before returning to our Picton accommodation by boat the next morning. The only way this could work would be for me to miss a night's PN. After discussing it with my hospital team, this is what I did. Again, this would not suit all HPNers.
- There are places where courier companies can't deliver to, or not within 24 hours of compounding, so alternative arrangements need to be made. One such time, I was staying in a small town in the Grampians in Victoria. My PN couldn't be delivered there within the required 24 hours, but it could be delivered to a depot in a town a couple of hours away. So, Ray and I picked it up at the depot, using the day to explore the area on our way.
- If you are holidaying in summer, or doing energetic activities, dehydration might become an issue for you. You could discuss with your hospital team whether you could travel with spare 1L bags of saline or Hartmann's in case you need more fluids.
- When you are booking accommodation, never assume there will be a large enough fridge to fit your PN bags in. This is especially the case with motels, which usually offer a very small bar fridge. I am able to supplement this with my before-mentioned plug-in car fridge, which runs on both 240 volt and 12 volt, but if you don't have this, then a larger fridge is necessary. A few years ago, I went on a short cruise. I was able to arrange for my PN bags to be stored in the hospital's fridge; I simply had to go there to collect a bag each day.
- Here's one that ended up in the too-hard basket and is still getting my occasional thoughts. A few years ago, I inquired about the possibility of my PN provider delivering to Hamilton Island. I was told it couldn't be done, as they couldn't guarantee it would arrive, due to possible cancellation of services due to weather. A possible solution could be staying at Airlie Beach to receive delivery, then boarding a ferry the next morning with the bags...provided that I can keep the bags chilled until I arrive... This is still a work in progress, but it gives you an idea of how a problem might have a solution if it gets enough thought!

New world-first app designed for patients/carers to manage their own IV access – “IV Passport”

Editor’s note: Karen, HPNer and PNDU’s first president (before that, convenor) 2011- 2019, represented PNDU in developing this amazing and helpful app for HPNers, something HPNers should all embrace. Dripline is raising awareness of the app again, as many clinicians are unaware of its existence. AuSPEN is running a webinar presentation by the researcher from AVATAR who was involved in developing it, to in-service clinicians. The full write-up of the development of this resource is in Dripline issue 36. Below are a couple of extracts to encourage our members to begin using this app and introduce it to their hospital teams.



Female adult display of the IV Passport app



Paediatric display

IV Passport was developed by a team of clinicians, consumers and app developers and is a tool by which consumers/carers can store and manage records of past, present and planned future IV access, as well as follow links to accurate and reliable resources for IV problem-solving. It’s free and the information stored is secure and consumer/carer-owned and managed. There is also the option to share data with chosen clinicians, GPs, etc, if desired.

Passport is currently available for downloading in Australia, New Zealand, USA and Canada:

- Android: <https://play.google.com/store/apps/details...> and
- Apple: <https://apps.apple.com/au/app/passport/id1555412253>.

In order to read the full story, click on the link below, or go to pndu.org resources, Dripline issue 36.

[Dripline Newsletter | Parenteral Nutrition Down Under \(\[pndu.org\]\(http://pndu.org\)\)](#)

Taurolidine central catheter lock solution

Editor's Note: This article is from IVTeam. For the full text, click on the link below.

[Taurolidine central catheter lock solution - Full Text \(ivteam.com\)](#)

Abstract:

Background: Parenteral nutrition administered via central venous catheter is an established treatment option for people with intestinal failure. A serious complication of central venous catheters is the high risk of catheter-related blood stream infections (CRBSI). Catheter locking solutions are one strategy for CRBSI prevention, with the solution taurolidine showing beneficial effects. The aim of this meta-analysis was to identify and synthesize evidence to assess taurolidine efficacy against comparators for the prevention of CRBSI for people with intestinal failure on parenteral nutrition.

Methods: Six health literature databases were searched for efficacy data of rate of CRBSI for taurolidine versus control among our study population, no study design limits were applied. Individual study data were presented for the number of CRBSI and catheter days, and rate ratio. Overall data were synthesized as a pooled risk ratio, with sub-group analysis by study design, control type, and taurolidine solution.

Results: Thirty-four studies were included in the final analysis. At the individual level all studies showed superior efficacy of taurolidine versus control for prevention of CRBSI. When the data were synthesized, the pooled risk ratio was 0.49 (95% CI 0.46 to 0.53, $p < 0.0001$), indicating a 51% decreased risk of CRBSI through the use of taurolidine. Sub-group analysis showed no difference depending on study design ($p = 0.23$), or control type ($p = 0.37$), and a significant difference for taurolidine type ($p = 0.0005$).

Conclusion: Taurolidine showed superior efficacy over controls regardless of study design or comparator group. The results show that taurolidine provides effective CRBSI reduction for people with intestinal failure on parenteral nutrition.

Reference:

Vernon-Roberts A, Lopez RN, Frampton CM, Day AS. Meta-analysis of the efficacy of taurolidine in reducing catheter-related bloodstream infections for patients receiving parenteral nutrition. *JPEN J Parenter Enteral Nutr.* 2022 Mar 1. doi: 10.1002/jpen.2363. Epub ahead of print. PMID: 35233792.

Upcoming Events



There are no upcoming events scheduled in the next 3 months.



There have been no donations in this quarter.

Planning Overseas Travel



As a founding member of [PACIFHAN](#) (International Alliance of Patient Organisations for Chronic Intestinal Failure & Home Artificial Nutrition), PNDU can put you in contact with sister organisations in various countries overseas (UK, USA, Czech Republic, Denmark, Italy, France, Poland and Sweden) which may be able to assist with any HPN travel questions in those countries. Just ask us at contactpndu@gmail.com.



Membership for Aussie and Kiwi HPNers and carers:



We welcome all Aussie and Kiwi HPNers (ie those living at home on Home Parenteral Nutrition) and carers to become PNDU members. To become a member, we invite you to go to our [website Membership page](#).

Benefits:

- Access to all areas of our website, including Members Only pages (Travel, Kiddies Korner, Pharmacy Scripts, Hints & Tips, Clinical Info and more ...).
- Access to one or both of our private on-line groups (email and Facebook), connecting you with a wonderful network of support from other HPNers and carers.
- Receive news/information on HPN-related issues.
- Opportunity to contribute to PNDU Inc.'s work in raising awareness of HPN and supporting HPN research.



For HPN clinicians, industry employees, overseas HPNers, carers and those just interested:



We also welcome others to join PNDU as members, giving you access to all pages of our website, receipt of our newsletter Dripline and other HPN-related news, as well as opportunity to contribute to PNDU Inc.'s work in raising awareness of HPN and supporting HPN research. To join, please go to our [website Membership page](#).



If you would like to support the work of PNDU, we would welcome your donation, no matter how big or small. Please go to the [Donate page](#) on our website for PayPal and Direct Deposit details.

All donations over \$2 made to PNDU in Australia are tax deductible!

For our New Zealand supporters, PNDU has partnered with IPANEMA, to make supporting PNDU from NZ easy! Tax deductible donations to PNDU can be made by NZ based companies to IPANEMA, while individuals in NZ making a donation to PNDU through IPANEMA may claim a tax credit for their donations*. IPANEMA will pass on to PNDU 100% of such funds. (*This is general information only, please see your accountant for specific advice about your financial rights and obligations.)

Donating via direct deposit

Please provide your name as a reference. If you require an acknowledgement/receipt of your donation, please email us at contactpndu@gmail.com.



<p>Australia (\$AUD) Bank: Westpac Account Name: PNDU Inc. BSB: 032 056 A/C No.: 482 738</p>	<p>NEW ZEALAND: (\$NZD): Bank: ANZ Account name: IPANEMA A/c No: 06 0273 0308799 00 Please include reference "PNDU" IPANEMA (Charities Commission Registration CC21178) is a NZ charity</p>
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Management Committee Members

President - Chris
Vice-President - Gillian
Secretary/Public Officer - Miranda
Treasurer - Naomi
Dripline Editor - Gillian
Committee Members - Ryan

Contact Us

Parenteral Nutrition Down Under Inc. ABN 49742201085
contactpndu@gmail.com | www.pndu.org
 Registered address: **128 Rainbow Street, Randwick NSW 2031, AUSTRALIA**
 PNDU Inc.'s privacy policy is available on our website www.pndu.org

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