PROBIOTIC THERAPY HOME INFUSION PROTOCOL

WHAT IS A HUMAN PROBIOTIC INFUSION ?

The human bowel contains a complex population of bacteria containing several hundred different species. The colon itself is densely populated with around 500 species and more than 30,000 subspecies of various normal bacteria. These organisms and the chemicals they produce affect the body and these effects can have both positive and negative impacts on health. The human flora protects us from pathogenic or "bad" bacteria, however if a bad bacterium does implant itself into the population of normal healthy "good" bacteria, it can have a debilitating and sometimes toxic affect on our health. Due to the nature of the bacteria which are able to produce spores, it is difficult to remove the infection which can remain for many years, even a lifetime.

The use of healthy human flora appears to be the most complete probiotic treatment available today. It acts as a broad-spectrum antibiotic capable of eradicating "bad" bacteria and spores, and supplies the "good" bacteria for recolonisation.

This therapy involves the infusion of healthy human donor faeces via enema into the bowel, which is prepared prior to the procedure. This infusion process is repeated for at least five days, depending on the severity of the condition.

The treatment is expected to improve symptoms of Irritable Bowel Syndrome and *potentially* cure the cause of the problem. This however is not guaranteed. The treatment has demonstrated success in treating some of the most difficult cases of Irritable Bowel Syndrome.

DIETARY REQUIREMENTS

You will need to go on a **LOW FIBRE DIET at least TWO WEEKS before** beginning the antibiotics and during the course of the antibiotics. The following list gives you an idea of low fibre foods:

- Refined cereals – white bread, pasta, rice cakes and pastries made from white flour
- Milk (all forms)
- Butter, margarine, oils
- Chicken and fish
- Egg dishes
- Jellies, custards, mousses
- Fruit and vegetables (cut down the amount you eat and discard the peel) – the following are relatively low in fibre:

Apples	Pears	Melon	Peaches	Cherries	Plums	Grapes
Pumpkin	Zucchini	Marrow	Lettuce	Capsicum	Cucumber	Potato

Foods to AVOID:

- Pork
- Processed meats: sausages, ham, salami
- Citrus Fruits
- Nuts and seeds
- Berries and dried fruit

Your diet must change to a HIGH FIBRE DIET after your first probiotic infusion and we recommend you maintain this high fibre diet to enable the new flora to be strong enough to survive and implant. You are able to eat the following:

- Anything “wholemeal” – bread, pasta, brown rice, pulses (lentils, beans, chickpeas), muesli, fibre enriched cereals.
- All fresh fruit and vegetables, including juices
- All meat, fish and chicken

AVOID the following foods:

- Oysters, shellfish, prawns
- Processed meats

EQUIPMENT FOR THE INFUSION

Equipment to be purchased through the Probiotic Therapy Research Centre

This equipment is essential for the infusion. Price on request.

- Enema bags
- Rectal tips

Equipment to be purchased locally

- Bottles or bags of normal saline.
- Lubricant
- Latex gloves
- Psyllium husks
- Imodium tablets (Loperamide)

You will also need the following

- Somewhere to hang the enema bag from, ie nail in the wall.
- Funnel
- Tissues
- Stool collection device (disposable 'takeaway' container or a potty!)
- Blender

BOWEL PREPARATION

You need to purchase **medication for a COLONIC LAVAGE.** – Usually this is available from a chemist without prescription. This is the same bowel prep you would use if you were undergoing a colonoscopy.

SCHEDULE FOR PROBIOTIC INFUSION

ANTIBIOTICS

You will need to take one or two of the following antibiotics as per the schedule below for a minimum of 10 day. You will be advised accordingly.

TIME	RIFAMPICIN	VANCOMYCIN	FLAGYL
Morning	1 capsule (150mg)	2 capsules (250mg)	1 tablet (400mg)
Night	1 capsule (150mg)	2 capsules (250mg)	1 tablet (400mg)

Your last dose of antibiotics will be taken
the night before your bowel washout

Diet
You should still be maintaining your low fibre diet at this point. Please refer to diet requirements section.

Bowel wash out…(the day before the first probiotic infusion)

ENSURE YOU HAVE CEASED YOUR ANTIBIOTICS BY THIS DATE

On waking in the morning:

- DO NOT EAT any solid foods.
- DRINK CLEAR FLUIDS ONLY – eg. clear soups, clear fruit juices, tea, coffee , Bonox, soft drinks.
- Follow the instructions on the back of the packet of the colonic prep starting at 10 am approximately (rather than the time mentioned on the packet).
- Drink the colonic prep throughout the day as per instructions on packet.
- IMPORTANT – please ensure you maintain your fluid intake to prevent dehydration..

COLONIC PREPARATIONS PROMOTE DIARRHOEA

Be prepared to visit the toilet regularly throughout the day

DAY ONE OF YOUR PROBIOTIC INFUSION

On Rising

In the morning, on rising, take 2 IMODIUM tablets. You only take these on the first morning of the infusion.

Diet

You will need to start your high fibre diet today as per instructions. You may have a light breakfast before commencing your daily infusions..

Infusion procedure

1. Collect donor stool in appropriate container. Place immediately into the blender with half teaspoon of the psyllium husks and between 100 – 400mls of normal saline (the volume of saline needed to make mixture 'pourable').

2. This should be blended for approximately 15 seconds.

3. Ensure the white ball in the bag is removed and the white clip is closed on the tubing. Pour this mixture into the enema bag via the red cap. Eliminate as much air as possible and close the red cap.

4. Once preparation is complete, recipient will lie on their LEFT side in the foetal position with lower half of body elevated.

5. Lubricate the rectal tip and gently insert the tip into the anus until you reach halfway of the blue tip.. Slowly unclamp the enema bag after hanging the bag up which will to commence the infusion. Allow 5-10 minutes for infusion.

6. Once infusion has been completed, clamp the tubing and gently remove the rectal tip (still attached to the tubing and bag). Discard the enema bag and tip and 'double bag' for disposal.

7. You then remain on your left side, massaging your abdomen for approximately 10 mins. Repeat this massage, lying on back, stomach and completing on your right side.

8. This procedure is repeated each day for 5 - 10 days approximately.

9. If you difficulty retaining the enema you can take Imodium or codeine as required.

REMEMBER ITS QUALITY NOT QUANTITY

Human Probiotic Infusion

Blood work and stool testing for patients and donors

A) HEP A > IgG / IgM

HEP B & C, HIV, CMV, EBV, RPR, TOXO SEROLOGY

B) STOOL TEST FOR:
a) CELLS
b) PARASITES IN SAF FIXATIVE
c) CULTURE INCLUDING CL DIFFICLE & TOXIN, YERSINIA,AEROMONAS & CAMP JEJUNI
d) ANTI – ADHESION ANTIBODY FOR E. HISTOLYTICA.

C) FBC, ESR, B12, FOLATE, TSH, ANA, U& E, CREAT, GLUC, LFTs.

HOME INFUSION

PROTOCOL

DONOR INSTRUCTIONS

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SELECTION OF DONORS

Donors are selected by the recipient on the following criteria:

- The potential donor must have a healthy bowel motion every day.
- No history of bowel problems (eg no constipation, diarrhoea, colitis etc)
- Is not on any medications that may interfere with stool viability (eg antibiotics).

As a potential donor you will be fully screened to ensure that you are free from infection. This involves a blood sample and stool tests as per the enclosed protocol.

DIETARY CHANGES

The person receiving your stool (recipient) will be relying on the donor to pass a bowel motion every day. We highly recommend that you start the following changes at least one week prior to the commencement of the infusion. These changes include :

1. **Avoiding foods at risk of contamination**

- Avoid shellfish, prawns, oysters and processed meats such as salami, ham and sausages.
- Avoid all antibiotics.

2. **You must commence a high fibre diet to improve the quality of your**

flora

- All breads, cereals and grain should be wholemeal. This includes bread, pasta, rice and breakfast cereals.
- Eat plenty of fresh vegetables (with the exception of corn).
- Include beans and pulses in your diet (lentils, chickpeas, beans, hommos)
- Eat at least two pieces of fruit per day
- Drink at least 1 litre of water per day.

MEAL SUGGESTIONS

Breakfast

- At breakfast have wholemeal toast, muesli or a high fibre cereal. Maybe include some yoghurt.

Lunch

- Salad sandwich with wholemeal bread and whatever filling you wish and a piece of fruit.
- Pasta with vegies
- Noodles with vegies

Dinner

- Pasta with meat, sauce and vegies
- Meat, fish or chicken with two types of vegies or salad and potatoes.
- Stir fried vegies (with or without meat) with noodles or brown rice.
- Brown rice with beans or lentils.

YOUR RESPONSIBILITIES AS A DONOR

As a donor it is vitally important that you understand the instructions mentioned. There are two major points:

1. You need to make sufficient dietary and lifestyle changes for the duration

of the recipient's treatment to ensure that you will pass a bowel motion every day.

2. If you experience any of the following, please withdraw from donating:

- Diarrhoea
- Vomiting
- Cold / flu
- Any antibiotic usage

HOW TO ENSURE YOU "GO" EVERY DAY

This is the biggest concern of the donor. By following the dietary recommendations above ,you should have no problem passing a bowel motion every day.

CONTACT

If there are any questions please contact **Sharyn Leis (SRN)**

Probiotic Therapy Research Centre (PTRC) on 612 – 9712 7255
or
Centre for Digestive Diseases on 612 – 9713 4011

QUESTIONNAIRE FOR POTENTIAL DONORS

1. When did you last use antibiotics ?

2. Have you experienced ‘travellers diarrhoea’ ?

3. Do you or have you worked within a hospital, health care facility or child care facility ?

4. Please describe your stool quality ie is it soft, hard or runny ?

5. How frequently do you go to the toilet in a day ie once per day, twice per day or more, or once every two to three days ?

6. Do you currently have or have you recently experienced any type of abdominal discomfort ie pain / cramping or swelling / bloating ?

7. Do you currently suffer from excessive flatulence (gas) ?

8. Do you currently experience nausea or heartburn ?

9. Have you ever noticed blood in your stool ?