

3rd September 2010

Lyme and Tick Borne Diseases Conference

Probiotics - not just acidophilus

1

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Agenda

What are probiotics & prebiotics?
Why strain selection is critical
OptiBac / Institut Rosell quality
The OptiBac Probiotics range
- For those on antibiotics
- For daily wellbeing
- For daily wellbeing EXTRA
Q&A / FAQs etc.

2

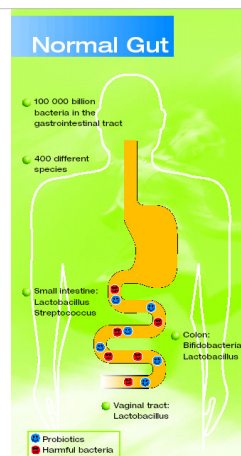
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What are Probiotics ? ? ?

'Live microorganisms which when administered in adequate amounts confer a health benefit on the host' (WHO, 2001)

3

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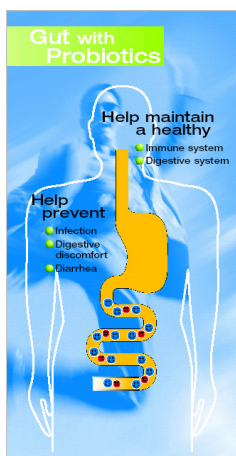


The intestines

- Surface area: more than 300m²
- 1st immune organ: 60 to 70% of body's immune cells
- 100 trillion bacteria
- Weighs about 1.5kg

4

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A healthy gut is key to a healthy body

Benefits of Probiotics

Healthy Digestion
Strong Immune System
Improved Energy Levels

5

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The balance is very fragile

This balance is easily offset by factors such as:

- Stress
- Ageing
- Medication (e.g. antibiotics & contraceptive pill)
- Additives and preservatives in our food
- High sugar levels
- Travelling abroad

6

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Probiotics?



Drawback: Most consumer knowledge of probiotics is limited to sugar-rich supermarket probiotics.

7

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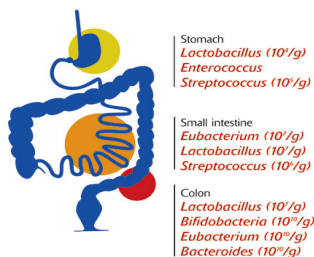
Probiotics +

SUGAR



Probiotic Strains

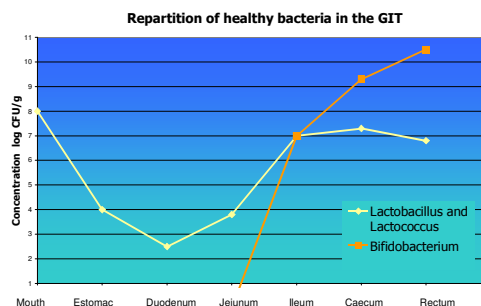
- Different strains/types of friendly bacteria reside in different zones throughout the length of the Gut



9

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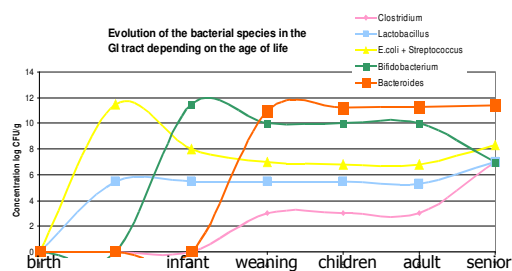
Strain choice: which species ?



10

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Strain choice: which species ?



11

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What are
Prebiotics
? ? ?

12

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Prebiotics



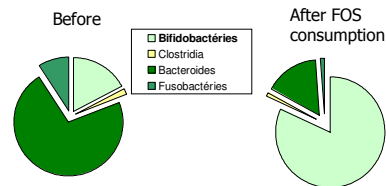
Indigestible fibres that selectively stimulate the growth and activity of beneficial bacteria (probiotics) of the intestinal flora

13

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The synergistic effect of probiotics and fructooligosaccharides (FOS)

- FOS selectively feed Bifidobacteria: called the 'bifidogenic effect'



14

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Safety

It is not recommended to give probiotics to:

- Severely immunosuppressed patients
- Post cardiac surgery patients
- Patients with pancreatitis
- Patients with Type 1 diabetes
- Patients in ICU
- Patients with blood in the stool

15

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Background to Probiotics & Prebiotics

- Any Questions so far ?

16

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Probiotics & lyme disease

- No direct studies currently published
- Important during & after antibiotic use
- Aims
 - Prevent thrush & diarrhoea etc.
 - Boost immunity
- As *Borrelia burgdorferi* can remain latent, having a strong immune system is critical

17

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Probiotics & Immunity

- Create a 'barrier effect'
- Produce antimicrobials such as lactic acid
- Compete for available nutrients & space (competitive exclusion)
- Improve the non-specific innate immune response
- Boost the acquired immune response (vaccine principle)

18

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Quality Probiotics



Undertake In vitro tests to prove specific strains...

- Survive gastric acidity (at varying pH levels & at 37 degrees Celsius to mimic the stomach)
- Survive bile salts
- Adhere to the intestinal wall lining e.g. epithelial cells
- Inhibit specific pathogens from binding
- Stimulate innate & adaptive immune response
- Have targeted actions & benefits for the host

19

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20

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For those on antibiotics



- Antibiotics kill both bad and good bacteria
- Prevent Thrush, Diarrhoea, Constipation
- 10 day course – typical antibiotic course is 5 to 7 days
- RRP: £5.49

21

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Stats about Antibiotic Associated Diarrhoea (AAD)

Frequency of AAD: 10 to 30%

Higher frequency with new generation of antibiotics

Antibiotic	AAD(*)	One day diarrhea
Penicillin G and V	3%	8%
Penicillin A and M	11%	21%
Amoxicillin + B-lact Inhibitor	23%	43%
Cephalosporin	9%	17%
Macrolides	8%	15%
Trimethoprim + Sulfamethoxazol	6%	25%
Erythromycin + Sulfafurazol	16%	24%

22

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Preliminary studies on FTOA

- 1) 20 children were with bronchitis or pneumonia were administered L. acidophilus Rosell-52 and L. rhamnosus Rosell- 11 with antibiotics.

No intestinal complaints were noted, including no record of AAD (FTOA Technical Dossier)

23

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Preliminary studies on FTOA

- 2) 15 children suffering from dysbacteriosis and diarrhoea following an antibiotic course were given L. acidophilus Rosell-52 and L. rhamnosus Rosell- 11.

Clinical symptoms were alleviated, consistency of stool improved and their number decreased. (FTOA Technical Dossier)

24

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For daily wellbeing



- General daily probiotic
- Boost daily immunity, digestion, energy levels
- IBS Sufferers
- For those with eczema, asthma, food intolerances, allergies, acne
- Retail price: £9.99

25

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ng EXTRA Strength



- gh Strength – 20 billion probiotic
- cluding L. acidophilus NCFM – the
orld's most well-researched
idophilus strain
- or those on long term antibiotic
urses, IBS, IBD etc.
- Retail price: £21.99

26

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And the others....



- For daily immunity
- For travelling abroad
- For your child's health
- For bowel calm
- For a flat stomach

27

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28

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Frequently Asked Questions:

- Do "healthy" people need to take probiotics?
- How long does it take to feel the effects of taking probiotics?
- What is the recommended dosage of probiotics?
- Do probiotics have any side effects and are there people who should not take probiotics?
- Are there any risks attached to taking too many probiotics?
- Can probiotics be taken by infants / during pregnancy?
- Is it better to take probiotics on an empty stomach or with meals?
- Are probiotics good for lactose intolerance?
- What factors are probiotics sensitive to?
- How should probiotics be stored?

29

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