Profido®
Your probiotics for better digestive health

Probiotics are defined by World Health Organisation (WHO) as live microorganisms including both bacteria and yeasts that, when administered in adequate amounts, confer a health benefit on the host. Their health benefits that have been supported by preliminary evidence include improving digestive health, promoting immune system and alleviating allergic disorders.¹

Amongst the health benefits, probiotics effect in digestive health such as constipation, antibiotic associated diarrhea, infectious diarrhea, and irritable bowel syndrome are the most established.² ³ ⁴

Recent studies suggested that the health benefits of probiotics are strain-specific and the species that are extensively studied are as follow:

Probiotics that are extensively studied:

- Lactobacillus sp.
- Saccharomyces sp.
- Bifidobacterium sp.

Bifidobacterium longum
Bifidobacterium lactis

Figure 1: Extensively studied genus and species of probiotics

Gut microbiota and age

The human intestine consists of a large colonial of microbial ecosystem. The combined number of our colon cells (10¹¹ to 10¹⁵ cells per gram range in the colon) is greater than the number of host cells.⁵ The gut microbiota can affect both the biology and physiology of the host; as such, gut microbiota has been referred as a ‘virtual organ’.⁶

There are various species of microbiota living in our guts and mainly are obligate anaerobes including clostridia, eubacteria, bacteroides groups and the genus bifidobacterium. The microbiota varies with age and particularly, bifidobacterium level declines over age as shown in figure 2.⁷

Figure 2: Bifido level in human intestines declines over age

Continued on page 2
Intestinal bifidobacteria are typical healthy intestinal microbiota that plays a significant role in maintaining human health. A Profido® consists of the two common bifidobacterium strains (30 billion CFU/sachet): Bifidobacterium longum (15 billion CFU/sachet) and Bifidobacterium lactis (15 billion CFU/sachet). Both strains exhibit good acid and bile tolerance and good adhesion properties, enabling probiotics colonisation, pathogen inhibition, immune interactions, and barrier function enhancement. With Profido®, the healthy intestinal microbiota can be restored and improve overall human health.

**GOOD ACID AND BILE TOLERANCE**

1. Pathogen Inhibition
2. Immune Interactions, Reduces Inflammation
3. Barrier Function Enhancement

**GOOD ADHESION PROPERTIES**

![Adhesion properties of Bifidobacterium longum & Bifidobacterium lactis](image)

**Xylitol9**

Profido® is sugar free and contains xylitol, a sugar substitute with the advantage in avoiding “sugar spikes” as it is slowly absorbed in the digestive tract. Xylitol also interferes with the pathogenic bacteria’s adherence ability to body tissues, providing a general boost to the immune system. Containing both probiotics and xylitol, Profido® can improve our digestive health and reduce incidence of infections.

- 30 billion CFU of bifidobacteria per sachet
- Sugar free with xylitol
- Fat free
- Preservatives free
- Suitable for both adults and children

**Recommended Dose:**

<table>
<thead>
<tr>
<th>Adults</th>
<th>2 sachets/day</th>
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<tbody>
<tr>
<td>Children</td>
<td>1 sachet/day</td>
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</table>

References:
Clamentin® Film Coated Tablet 1000mg
Effective Antibiotic to Tackle Multiple Infections

**Beta-lactam Antibiotics**
Beta-lactam antibiotics refer to the group of antibiotics that contain beta-lactam ring in their chemical structure such as penicillin, cephalosporin and other related compounds. They are generally active against most of the gram-positive, gram-negative and anaerobic organisms by interfering the structural cross-link of peptidoglycans in bacterial cell walls.

**Resistance to Beta-Lactam Antibiotics**
Increasing resistance to beta-lactam antibiotics has become a common problem in primary care medicine. One of the mechanisms of beta-lactam antibiotics resistance is via the production of beta-lactamases, which are enzymes that cleave the beta-lactam ring. Beta-lactamase activity is active in gram-positive organisms (Staphylococcus aureus and Staphylococcus epidermidis); gram-negative organisms (Haemophilus influenzae, Neisseria gonorrhoeae, Moraxella catarrhalis, Escherichia coli, and Proteus, Serratia, Pseudomonas and Klebsiella species); and anaerobic organisms (Bacteroides species). To overcome this resistance mechanism, β-lactam antibiotics are often given together with β-lactamase inhibitors such as clavulanic acid.

**Clamentin®: A Combination of Amoxicillin and Clavulanic Acid**
Clamentin® contains two active ingredients called amoxicillin and clavulanic acid. It is an antibiotic with a notably broad spectrum of activity against the commonly occurring bacterial pathogens in general practice and hospital. Amoxicillin is an acid stable, semi-synthetic antibiotic belonging to the class of Penicillin. The beta-lactamase inhibitory action of clavulanate extends the spectrum of amoxicillin to embrace a wider range of organisms, including many organisms that are resistant to other beta-lactam antibiotics.

![Chemical Structure of Amoxicillin](image1)

**Recommended Dose**
For adults and children over 12 years old:
Severe infection: One Clamentin Film Coated Tablet 1000mg twice daily.
Therapy should be started parenterally and continued with an oral preparation.

*This is only a summary of dosage information. Please refer to package insert for more details.*

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References:
3. YSP package insert of Clamentin Film Coated Tablet 1000mg
EFFECTIVENESS OF A CRANBERRY (*Vaccinium macrocarpon*) PREPARATION IN REDUCING ASYMPTOMATIC BACTERIURIA IN PATIENTS WITH AN ILEAL ENTEROCYSTOPLASTY

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**INTRODUCTION**

Bacteriuria is a usual complication of enterocystoplasty following cystectomy. [1-3] Cranberry is able to inhibit the adherence of restructure *E.coli* to uroepithelial cells because of the presence of a non-dialysable compound, proanthocyanidin (PAC) type A, which is a condensed tannin. There are three species of cranberry which includes *Vaccinium macrocarpon*, *Vitis oxyccocus* and *Vitis idea*. Out of the three, *Vaccinium macrocarpon* is the only species that contain PAC type A and able to restrict adhesion of *E.coli*. [4]

**OBJECTIVE**

To determine the effectiveness of treatment with a cranberry preparation highly dosed in PAC type A in prevention of repeated bacteriuria in patients with an ileal enterocystoplasty.

**METHODOLOGY**

A controlled study between November 2004 and November 2009 was opened to follow-up patients after a radical cystectomy and a bladder replacement. The inclusion criteria were (i) patients with a radical cystectomy, [5] (ii) repeated urinary infections (at least two episodes) and/or bacteriuria with a significant count of colony-forming units. During the treatment phase, patients received a cranberry highly dosed in PAC type A [36 mg measured by the dimethyaminocinnamaldehyde(DMAC) method] with one capsule a day (Urell in Europe, Ellura in the USA). The primary endpoint was the absence of bacteria in urine culture. [6] The secondary endpoints were the presence or absence of symptoms (pain, fever), continence status and upper excretory tract enlargement.

**RESULTS**

Fifteen patients (13 men, 2 women), aged 68 ± 9 years were included. The median duration of the period without treatment with cranberry compound was 18.5 months. The median duration of the period with treatment with cranberry compound was 32.8 months (Table I). There was a significant decrease in the rate of symptoms and urinary incontinence during treatment (Table II).

<table>
<thead>
<tr>
<th>Table I. Infectious episodes during the two periods of observations for all patients</th>
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<tbody>
<tr>
<td><strong>Period without treatment</strong></td>
</tr>
<tr>
<td>No. of urinary cultures taken</td>
</tr>
<tr>
<td>Patient</td>
</tr>
<tr>
<td>1</td>
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<td>15</td>
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</tbody>
</table>

Continued on page 5
Table II. Results of endpoints before and during treatment with cranberry preparation

<table>
<thead>
<tr>
<th></th>
<th>Before treatment</th>
<th>During treatment</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with positive urinary culture</td>
<td>15 (100%)</td>
<td>1 (6.6%)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Patients with symptoms (pain, fever)</td>
<td>4 (26.6%)</td>
<td>0 (0%)</td>
<td>0.03</td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>9 (60.0%)</td>
<td>2 (13.3%)</td>
<td>0.03</td>
</tr>
<tr>
<td>Night-time urinary incontinence</td>
<td>11 (73.3%)</td>
<td>6 (40.0%)</td>
<td>ns</td>
</tr>
<tr>
<td>Upper excretory tract enlargement</td>
<td>2 (13.3%)</td>
<td>1 (6.6%)</td>
<td>ns</td>
</tr>
<tr>
<td>No. of day-time urinations</td>
<td>6.4 ± 1.3</td>
<td>6.4 ± 0.5</td>
<td>ns</td>
</tr>
<tr>
<td>No. of night-time urinations</td>
<td>2.7 ± 0.9</td>
<td>2.2 ± 0.6</td>
<td>ns</td>
</tr>
</tbody>
</table>

ns = not significant

DISCUSSION

A significant decrease in bacterial adherence was noted after the consumption of cranberry. The present study showed that bacteriuria was correlated with incontinence in patients with ileal enterocystoplasty. In addition, no side effects were reported after the consumption of cranberry compounds. The evidence of the results requires confirmation by a randomized, double-blind study.

CONCLUSION

Treatment with a cranberry compound seems to be effective in reducing asymptomatic bacteriuria in patients with an ileal enterocystoplasty.

References:
Ageing and skin health
Cell division is an essential function that leads to growth and development of organs, replaces damaged cells, and allows body to adapt to change. Ageing can be thought of as arising from an intrinsic process characterized by failure of repair and maintenance of tissues and organs with increasing age. A study has shown that between third and eighth decades of life, the epidermal turnover rate slows down from 30% to 50%. The cascade of changes related to decelerated cell turnover results, in older skin and the development of heaps of corneocytes that render the skin surface rough and dull in appearance.

Why placenta
Placenta extract has been reported to contain many important nutrients such as enzymes, nucleic acids, vitamins, minerals and amino acids, which promote skin regeneration and maintain skin youthfulness. It also stimulates collagen production and inhibits production of collagen-degrading enzyme. In medical profession, sheep placenta has been known as major source of placenta extract due to their compatibility with human body and do not cause allergic reaction.

Coenzyme Q10 complements anti-ageing therapy
Coenzyme Q10 (Co-Q10) is an antioxidant responsible for energy production, cell growth and cell maintenance. Co-Q10 has been shown to diminish with age, and deplete due to ultraviolet (UV) ray exposure. Co-Q10 can help to complement anti-aging therapy as it neutralizes free radicals and may reduce or even help prevent some of the damages caused to cell membranes, tamper with DNA and cell death.

Regain youth with just one softgel a day
With cell culture and advanced extraction technology, Celloceutica® Sheep Placenta with Co-Q10 Plus Softgel is extracted from 15,000mg of New Zealand Ovine Placenta. It undergoes 150:1 extraction ratio, then condensed into a standardized, bioactive, 100mg placenta extract. Each softgel contains premium active ingredients such as coenzyme Q10, zeaxanthin, biotin, vitamin E and grape seed extract. These ingredients have undergone nitrogen flushing process to avoid oxidation and decomposition of active cells components. Apart from receiving revitalizing energy, you can regain youth with only one Celloceutica® Sheep Placenta with Co-Q10 Plus Softgel a day.
Active Ingredients | Health Benefits
--- | ---
Sheep Placenta Extract | Contains bioactive substances for cell rejuvenation.
Coenzyme Q10 | Provides energy to cells, enhancing growth and maintenance of cells.
Zeaxanthin | Helps protect eye from ultraviolet (UV) ray and prevents free radical damage to retina and lens of the eye.
Biotin | Produces fuel for cells and supports cell growth.
Vitamin E | Prevents women complications.
Grape Seed Extract | Works synergistically with coenzyme Q10 to protect skin from free radical damage.

Each Celloceutica® Sheep Placenta with Co-Q10 Plus Softgel contains:

- Sheep Placenta Extract (Extraction ratio 150:1)..................100mg
- Coenzyme Q10.......................................................30mg
- Tagetes Erecta Extract (providing Zeaxanthin 1.5mg)...........30mg
- Biotin.................................................................0.3mg
- Vitamin E.........................................................50IU
- Grape Seed Extract.............................................30mg

Dosage and administration:

Take 1 to 2 softgels once daily, preferably in the morning with breakfast.