



➤ Product Review ◀

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NEW PRODUCT FROM MOSS NUTRITION – COLOSTRUM SELECT™

I think we would all agree that probably one of the most pressing concerns expressed by the majority of chronically ill patients that come our way all relate to GI dysfunction.

Furthermore, adding to the challenge of addressing the needs of these patients is the fact that there are numerous variations in how GI dysfunction is expressed from patient to patient. Therefore, current feedback from you suggests that it is best to have a large menu of different products from which to choose to address the various subtleties and permutations in GI dysfunction demonstrated by different patients. In turn, even though the **Moss Nutrition Select** line of supplements already contains several products geared towards optimization of GI health, we felt strongly for some time that there exists other exceptionally efficacious products that should be added to the line. One of these is bovine colostrum.

Of course, as you might expect, there exists several different colostrum products on the market from which we could choose to include in the **Moss Nutrition Select** line. Because we wanted a colostrum product that had a good track record in terms of quality and efficacy as demonstrated by clinical reports and documented product content, we chose the **Tegricel®** brand of bovine colostrum. Why? As you will see from the enclosed technical bulletin, one reason is that it is standardized for one of the most important active constituents in terms of immune and GI health optimization, IgG. In fact, the amount is quite high – 40% of the total content. Another reason is that it is certified Kosher.

Of course, I would suspect that many of you may be wondering about the specific role of supplemental colostrum in any form in terms of addressing GI health and, possibly, other patient needs. Therefore, I would now like to review a paper that addresses the use of colostrum with one of the most common GI problems we deal with almost daily in our chronically ill patients, increased intestinal permeability or “leaky gut.”

Use of Colostrum Select™ with leaky gut

In “Oral supplementation with bovine colostrum decreases intestinal permeability and stool concentrations of zonulin in athletes” by Halasa et al (Halasa M et al, *Nutrients*, Vol. 9, No. 370, 2017) 16 healthy male athletes aged between 20 and 43 years (median = 26 years, mean = 27.5 years) engaged in peak training for competition were evaluated. Of course, you may be wondering how a study performed on young athletes relates to the chronically ailing patients you are treating. The answer is that aggressive training, no matter what the age, is a significant environmental stressor, which can adversely affect gut permeability. Halasa et al note:

“We chose athletes because they are known to have increased intestinal permeability, which is also in line with our previous unpublished results.”

The paper begins with a discussion on the relationship between gut health and immune function:

“The effect of the gut physiology on the immune system is recognized. This may help to explain intestinal involvement in generation of allergies and, more recently, auto-aggressive immune responses.”

What factor in gut physiology has the greatest impact on immune function? While this

question could be answered in many ways, it is generally recognized, as we all know, that intestinal permeability is the most important factor involved in the gut-immune system interrelationship. The authors state:

“Several mechanisms have been proposed to explain the influence of intestinal malfunction on the immune system dysregulation, the most compelling of which point to involvement of intestinal permeability status.”

What specific factor in gut physiology seems to be most important in regulating intestinal permeability and, by extension the impact of the gut on systemic immune function? As we have learned over the last 1-2, years, it is a substance called “zonulin.” Halasa et al state:

“The relationship of zonulin, which is a physiological permeability regulator, and the development of celiac disease described by Fasano et al was the first established pathogenetic axis for an autoimmune response.”

Therefore, optimizing zonulin function has been suggested as a way to decrease intestinal permeability:

“Blocking the zonulin receptor has been investigated by Fasano, and that method seems promising in cases of increased permeability developing because of pathologically upregulated zonulin.”

To determine whether bovine colostrum supplementation could improve gut permeability in athletes who have compromised gut permeability status, the athletes mentioned above were divided into equal groups of eight. Each group was dosed for 20 days with either 500 mg per day of bovine colostrum or a placebo, which was whey. The study was conducted when the athletes were engaging in peak training for competition, a time when increased gut permeability would be most significant in these individuals. Gut permeability was assessed both on day 0 and on day 22 by two methods – the traditional assay for gut permeability (The lactulose/mannitol test) and stool zonulin levels.

What were the results of the study? Halasa et al note:

“To the best of our knowledge, our trial was the first to demonstrate that supplementation with bovine colostrum decreased and mostly restored to normal values two parameters reflecting intestinal permeability: the lactulose/mannitol ratio in urine and zonulin concentration in stool.”

Colostrum Select™ supplementation and patient outcome

Since the Halasa et al study discussed above did not mention the impact of colostrum supplementation on symptomatology or quality of life, I did want to briefly mention another study where these variables were ascertained. In “Bovine colostrum supplementation and upper respiratory symptoms during exercise training: a systemic review and meta-analysis of randomised controlled trials” by Jones et al (Jones AW et al. *BMC Sports Science, Medicine and Rehabilitation*, Vol. 8, No. 21, 2016) five studies that evaluated the impact of bovine colostrum supplementation on upper respiratory symptoms during exercise training were considered. The total amount of participants in the five studies was 152. What were the findings of this cumulative study? Jones et al state:

“The review identified five randomised controlled trials evaluating the short-term effects of bovine colostrum on upper respiratory symptoms during exercise training. Synthesised data from five trials showed a statistically significant effect in which, compared to placebo, bovine colostrum reduced the rate of upper respiratory symptom days by 44%. Similarly, synthesized data from four trials indicated statistically significant effects favouring bovine colostrum with a 38% reduction in episode rates of upper respiratory symptoms.”

To learn more about **Colostrum Select™** please see the technical bulletin or contact us.

Colostrum Select™

Contents: 120 caps each containing 600 mg