

Introducing

# UltraFlora® Integrity

Targeted to Help Support Intestinal Immune Health\*

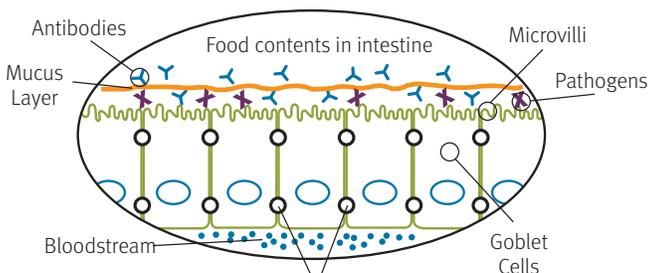


Healthy functioning of the intestinal barrier is important to ensure only the appropriate molecules pass into the bloodstream and lymphatic system. The intestinal barrier is supported by multiple mechanisms, including tight junctions between intestinal epithelial cells, which can be influenced by the bacteria of the intestinal microbiome. Supporting tight junctions may aid healthy intestinal permeability.

## Why UltraFlora Integrity?

- Features 100 million CFU of patented probiotic strain *Lactobacillus salivarius* UCC118, which preclinical studies suggest may influence tight junctions between intestinal cells\*<sup>1</sup>
- Preclinical research suggests that *L. salivarius* UCC118 may beneficially influence immune cell signaling processes\*<sup>2,3</sup>
- After consumption, *L. salivarius* UCC118 colonizes the gut and may persist there for several days<sup>4,5</sup>
- Backed by the Metagenics ID Guarantee for purity, clinical reliability, and predicted safety via scientific identification of strains with established health benefits
- Gluten-free, non-GMO, and vegetarian

### Healthy Intestinal Cells with Tight Junctions



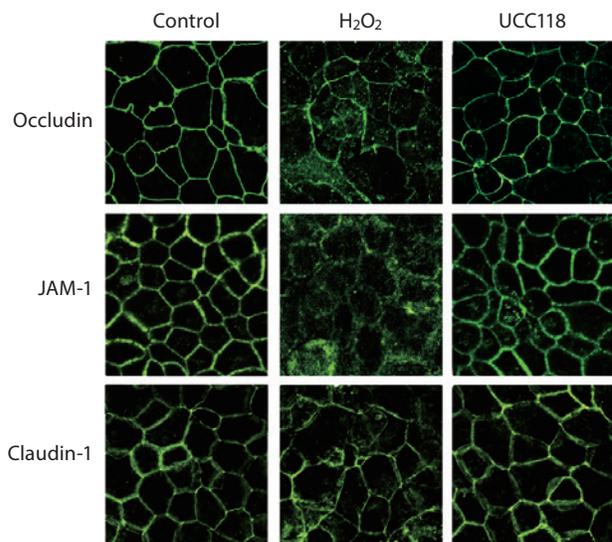
Tight junctions between epithelial cells regulate paracellular transport and contributes to a healthy intestinal barrier

## Scientific Rationale

In an *in vitro*, validated model of human intestinal epithelial cells, researchers assessed the effects of *L. salivarius* exposure on localization of tight junction proteins by confocal microscopy.<sup>1</sup>

- Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) exposure disrupted and redistributed the tight junction proteins occludin, JAM-1, and claudin-1.<sup>1</sup>
- Pretreatment with *L. salivarius* UCC118 helped maintain tight junction protein integrity (Figure 1).<sup>\*1</sup>
- In separate preclinical research, *L. salivarius* UCC118 has been shown to produce a bacteriocin, a beneficial protein that may influence intestinal microbial composition.\*<sup>3,6,7,8</sup>
- In another study, UCC118 has been found to adhere to the colon in humans after oral intake.<sup>5</sup>

**Figure 1.** Effect of *L. salivarius* UCC118 strain on H<sub>2</sub>O<sub>2</sub>-induced relocalization of tight junction proteins\*<sup>1</sup>



\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

**Form:** 30 Capsules

**Serving Size:** 1 Capsule†

*Lactobacillus salivarius* UCC118 .....100 million CFU\*\*

**Other Ingredients:** Starch, capsule (hypromellose), and magnesium stearate (vegetable).

**Directions:** Take one capsule daily or as directed by your healthcare practitioner.

**This product is non-GMO, gluten-free, and vegetarian.**

**Caution:** Keep out of the reach of children.

**Storage:** Keep refrigerated.

†Vegetarian capsule  
\*\*At date of expiration

### Complementary Products:

- **Glutagenics®:** Powerful gastrointestinal lining support\*
- **CandiBactin BR® or CandiBactin AR®:** For support of a healthy microbial balance\*
- **D<sub>3</sub> 10,000 with K<sub>2</sub>:** High potency, bioactive vitamin D with vitamin K\*

#### References:

1. Miyauchi E et al. *Am J Physiol Gastrointest Liver Physiol.* 2012;303:G1029-G1041.
2. McCarthy J et al. *Gut.* 2003;52:975-980.
3. O'Callaghan J et al. *Applied and Environmental Microbiol.* 2012;78(15):5196-5203.
4. Collins JK et al. *Microbial Ecology in Health and Disease.* 2002;14:81-89.
5. Dunne C et al. *Microbial Ecology in Health and Disease.* 2004;16:96-104.
6. Corr SC et al. *PNAS.* 2007;104(18):7617-7621.
7. Dunne C et al. *Antonie van Leeuwenhoek.* 1999;76(1-4):279-292.
8. Riboulet-Bisson E et al. *PLoS ONE.* 2012;7(2):e31113.

\*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

➤ Talk to your healthcare practitioner today about **UltraFlora® Integrity**, or visit [Metagenics.com](http://Metagenics.com)

