

Introduction

The scope of this analysis is to determine if Purium's Biome Medic product will have any adverse affect on persons with celiac disease (CD). In a study published in the American Society for Clinical Nutrition¹, 50 persons with CD were exposed to various levels of gluten. The study concluded that the ingestion of gluten should be kept lower that 50mg/day in the treatment of CD.

Gluten exposure calculation for 'Gluten-Free' Pasta

- Standard recommended servings size for Gluten Free Pasta is 56g (56000mg)
- FDA limit to claim gluten free is 20ppm (20mg gluten / 1kg of food)

Calculation for Gluten exposure per serving is as follows;

$$56g \text{ Pasta} \times \frac{1kg}{1000g} = .056kg \text{ Pasta}$$

Assuming 20 ppm (FDA limit)

$$.056kg \text{ pasta} \times \frac{20mg \text{ gluten}}{1kg \text{ pasta}} = \mathbf{1.12 \text{ mg gluten per serving}}$$

Gluten exposure calculation for Purium's Biome Medic

- Serving size is 1 capsule (550mg)
- Gluten testing indicates 218ppm

Calculation for Gluten exposure per serving is as follows

$$550mg \text{ Biome Medic} \times \frac{1g}{1000mg} \times \frac{1kg}{1000g} = .00055kg \text{ Biome Medic}$$

Using test result of 218ppm

$$.00055kg \text{ Biome Medic} \times \frac{218mg \text{ gluten}}{1kg \text{ Biome Medic}} = \mathbf{0.119 \text{ mg gluten per serving}}$$

Conclusion

One would have to ingest almost 10 pills per day to be exposed to the same amount of gluten contained in a single serving of gluten free pasta, and over 500 pills to reach the threshold established in the American Society for Clinical Nutrition study from 2007.

¹ <http://ajcn.nutrition.org/content/85/1/160.full>