

Influence of a specialized probiotic formula on mood:

FOUR CASE REPORTS



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PROBIOTIC FORMULATION:

Target gb-X™ with Ecologic BARRIER
Klaire Labs (Reno, NV)

introduction

Seven total patients were enrolled in a pilot, open-label user trial of a specialized 9-strain, 5 billion CFU probiotic blend designed to support the gut-brain axis and positive mood through intestinal barrier strengthening, mast cell activation inhibition, lipopolysaccharide digestion, and anti-inflammatory cytokine production.¹

- **Four individuals** completed each survey at the induction, 4-week post supplementation, and 8-week post supplementation self-assessment time points.
- **Three out of four** reported at least a slight improvement in anxiety, rumination, satisfaction, mental clarity, and interest in pleasurable activities. Half the participants reported at least slight improvement in stress, with one reporting a slight deterioration in stress level as the result of a pet's illness and subsequent death.
- **One individual** reported gas and loose stool which resolved over time and with the switch from an early morning to a late evening consumption regimen.

SCALE	SLIGHT CHANGE	SIGNIFICANT CHANGE
1-10 Low-High	≤ 2 point shift ≤ 20% change	≥ 3 point shift ≥ 30% change

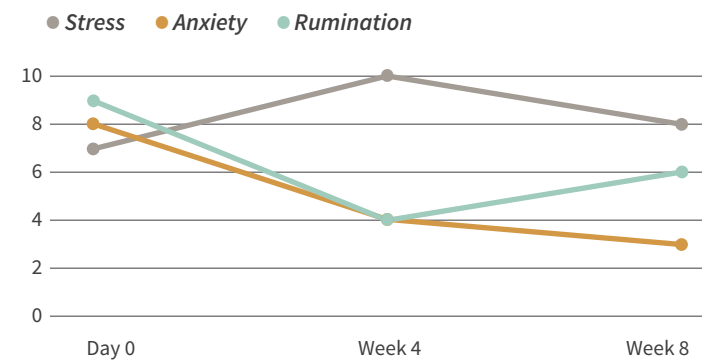
Self-Assessment Results

Parameter	Significant Improvement	Slight Improvement	No Change	Slight Deterioration	Significant Deterioration
Stress	25%	25%	-	50%	-
Anxiety	25%	50%	-	25%	-
Rumination	75%	-	25%	-	-
Satisfaction	-	75%	-	25%	-
Mental Clarity	50%	25%	-	25%	-
Interest in Pleasurable Activities	25%	50%	25%	-	-

case report: one

Participant ID: BE
Date of Birth: 08/15/84
Race: Caucasian
Gender: F
Occupation: Mortgage Loan Consultant
Lifestyle: Single mother, 4 yr old child
 Non-drinker, non-smoker
 Active
 Average 8 hrs sleep/night
Medications: None

Parameter	Induction Day 0	4 wks Target gb-X Supplementation	8 wks Target gb-X Supplementation
Stress	7	10	8
Anxiety	8	4	3
Rumination	9	4	6
Changes & Comments	Participant's dog became ill. Dies by 8-week survey point. Participant reported loss of sleep, increased stress, and worry over the situation.		
Satisfaction	9	10	8
Mental Clarity	5	10	8
Interest in Pleasurable Activities	8	10	10



findings

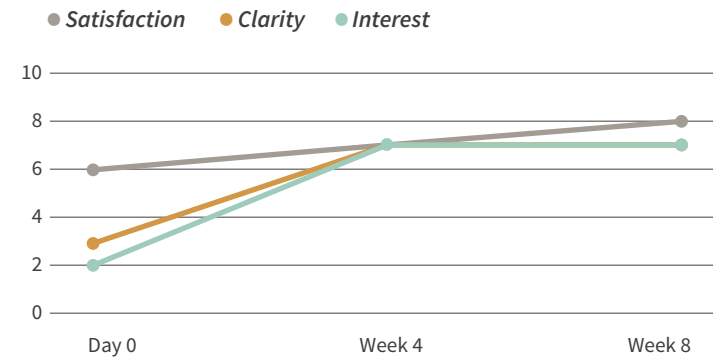
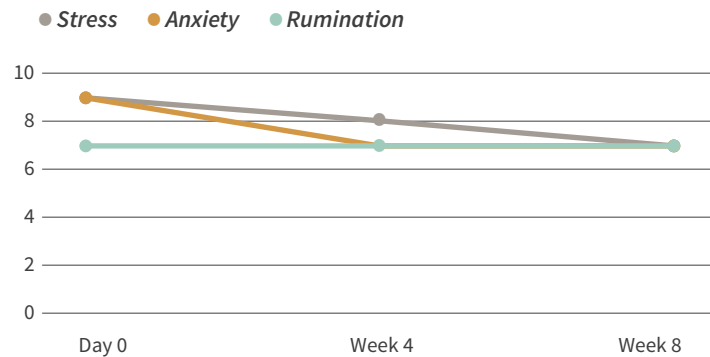
Over the course of the 8-week regimen, BE reported significant decreases in both anxiety and rumination despite the increased stress level brought about by her pet's illness and ultimate loss. In the same time period, BE reported a significant increase in mental clarity and slight increase in her interest in pleasurable activities.

1. Van Hemert et al. Influence of the multispecies probiotic Ecologic Barrier on parameters of intestinal barrier function. *Food and Nutrition Sciences*, 2014, 5, 1739-1745.

case report: two

Participant ID: TN
Date of Birth: 07/31/59
Race: Caucasian
Gender: F
Occupation: Hairstylist
Lifestyle: Married, no children
 Non-drinker, non-smoker
 Moderately active
 Average 7 hrs sleep/night
Medications: Testosterone (6 mg)
 Lisinopril (40 mg)
 Synjardy® (25-1000 mg)
 Hydrazine (50 mg)

Parameter	Induction Day 0	4 wks Target gb-X Supplementation	8 wks Target gb-X Supplementation
Stress	9	8	7
Anxiety	9	7	7
Rumination	7	7	7
Changes & Comments	Participant complained of gas and loose stools. Switched Target gb-X consumption from early AM to immediately before bed. No further complaints.		
Satisfaction	6	7	8
Mental Clarity	3	7	7
Interest in Pleasurable Activities	2	7	7



findings

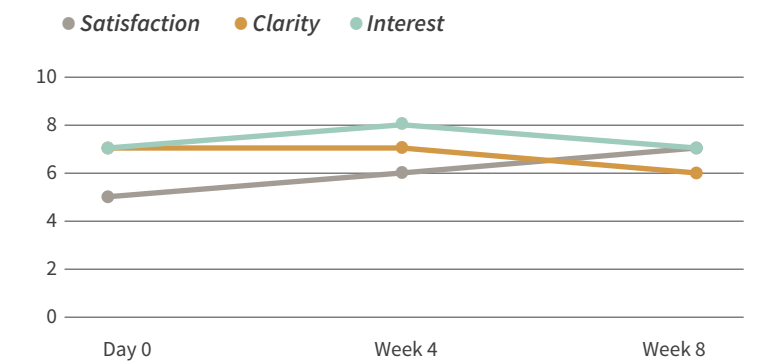
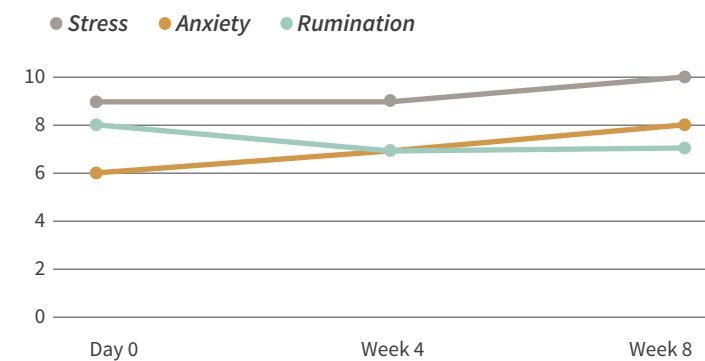
Over the course of the 8-week regimen, TN reported slight decrease in stress and anxiety. In the same time period, TN reported significant increases in mental clarity and interest in pleasurable activities and a slight improvement in overall satisfaction.



case report: three

Participant ID: JM
Date of Birth: 05/26/71
Race: Caucasian
Gender: M
Occupation: Branch Manager
Lifestyle: Divorced, no children
 Occasional-drinker, non-smoker
 Moderately active
 Average 8 hrs sleep/night
Medications: None

Parameter	Induction Day 0	4 wks Target gb-X Supplementation	8 wks Target gb-X Supplementation
Stress	9	9	10
Anxiety	6	7	8
Rumination	8	7	7
Changes & Comments	None reported.		
Satisfaction	5	6	7
Mental Clarity	7	7	6
Interest in Pleasurable Activities	7	8	7



findings

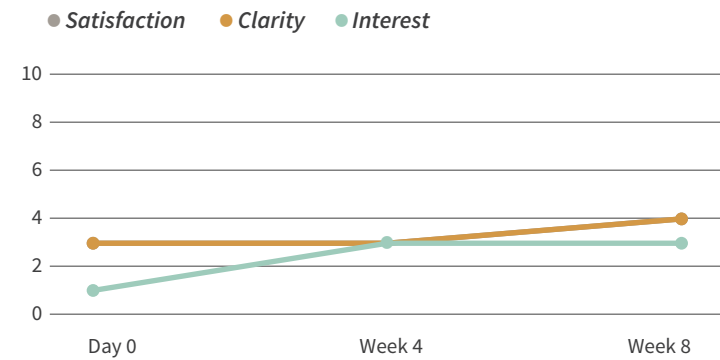
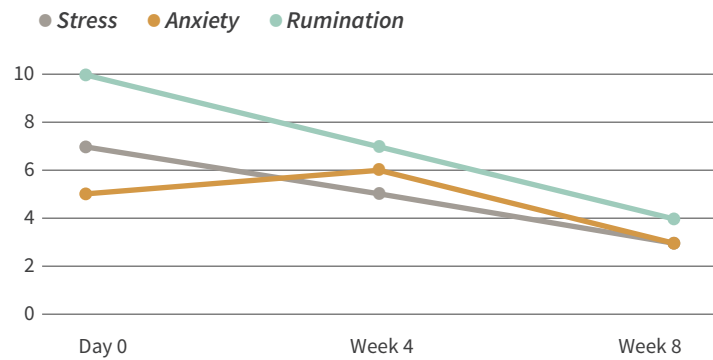
Over the course of the 8-week regimen, JM reported a slight increase in stress and anxiety, with a slight decrease in rumination. In the same time period, JM reported a slight increase in satisfaction along with a slight decrease in mental clarity.



case report: four

Participant ID: EW
Date of Birth: 01/22/46
Race: Black
Gender: F
Occupation: Nurse
Lifestyle: Single, adult children
 Occasional-drinker, non-smoker
 Moderately active
 Average <5 hrs sleep/night
Medications: Wellbutrin® (75 mg)
 Cymbalta® (60 mg)
 Neurontin® (300 mg)

Parameter	Induction Day 0	4 wks Target gb-X Supplementation	8 wks Target gb-X Supplementation
Stress	7	5	3
Anxiety	5	6	3
Rumination	10	7	4
Changes & Comments	None reported.		
Satisfaction	3	3	4
Mental Clarity	3	3	4
Interest in Pleasurable Activities	1	3	3



findings

Over the course of the 8-week regimen, EW reported significant reduction in stress and rumination with a slight reduction in anxiety. In the same time period, EW reported slight increases in satisfaction, mental clarity, and interest in pleasurable activities. Of the four cases here, EW shows the most significant shift in mood demonstrating a complementary effect to existing antidepressant medications.

gut-brain axis formulation Ecologic BARRIER

Available in the United States as Target gb-X™, Klaire Labs (Reno, NV)

- *Lactobacillus casei* W56
- *Lactobacillus acidophilus* W37
- *Lactobacillus brevis* W63
- *Lactococcus lactis ssp. lactis* W58
- *Bifidobacterium animalis ssp. lactis* W52
- *Lactococcus lactis ssp. lactis* W19
- *Lactobacillus salivarius* W24
- *Bifidobacterium bifidum* W23
- *Bifidobacterium lactis* W51

