Memory updating and hypnotherapy in the modulation of lactose intolerance: A

multiple case report

Atualização de memórias e hipnoterapia na modulação da intolerância à lactose: Um relato de múltiplos casos

Actualización de memorias e pipnoterapia en la modulación de la intolerancia a la lactosa: Un reporte de casos múltiples

Received: 03/10/2025 | Revised: 03/19/2025 | Accepted: 03/19/2025 | Published: 03/22/2025

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Abstract

Lactose intolerance affects millions of people worldwide, significantly impacting quality of life due to undesirable gastrointestinal symptoms. Conventional treatments, such as dietary restriction and enzyme supplementation, fail to address potential emotional and psychological factors influencing the condition's manifestation. This study aims to investigate the application of memory regression and updating using the RB7 method in treating lactose intolerance, analyzing whether psychological intervention can modulate patients' physiological responses. A total of 42 participants with a confirmed diagnosis were selected, of whom 36 completed the protocol. The intervention consisted of four individual hypnotherapy sessions focused on identifying and reinterpreting memories associated with adverse responses to lactose consumption. Symptom assessments were conducted before and after the intervention, as well as at a six-month follow-up. Results demonstrated a significant reduction in symptom frequency and intensity, with sustained therapeutic effects over time. These findings suggest that memory updating may play a crucial role in the physiological response to food intolerance, offering new insights for integrative therapeutic approaches. Further research is needed to elucidate the underlying mechanisms and explore its applicability to other gastrointestinal and psychosomatic conditions.

Keywords: Lactose intolerance; Hypnosis; Memory Consolidation; Psychosomatic Medicine; Neurosciences; Psychotherapy.

Resumo

A intolerância à lactose afeta milhões de pessoas em todo o mundo, impactando negativamente a qualidade de vida devido a sintomas gastrointestinais indesejados. Os tratamentos convencionais, como restrição dietética e suplementação enzimática, não abordam potenciais influências emocionais e psicológicas na manifestação dessa condição. Este estudo tem como objetivo investigar a aplicação da regressão e atualização de memória usando o método RB7 no tratamento da intolerância à lactose, analisando se a intervenção psicológica pode modular as respostas fisiológicas dos pacientes. Foram selecionados 42 participantes com diagnóstico confirmado da condição, dos quais 36 completaram o protocolo. O tratamento consistiu em quatro sessões individuais de hipnoterapia focadas na identificação e ressignificação de memórias associadas a respostas adversas ao consumo de lactose. A avaliação dos sintomas foi realizada antes e após a intervenção, bem como em um acompanhamento de seis meses. Os resultados indicaram uma redução significativa na frequência e intensidade dos sintomas, além da manutenção dos efeitos terapêuticos no período de seguimento. Os achados sugerem que a atualização de memórias pode desempenhar um papel fundamental na resposta fisiológica à intolerância alimentar, levantando novas perspectivas para abordagens terapêuticas integrativas. Estudos adicionais são necessários para compreender os mecanismos subjacentes e explorar sua aplicabilidade a outras condições gastrointestinais e psicossomáticas.

Palavras-chave: Intolerância à lactose; Hipnose; Consolidação da Memória; Medicina Psicossomática; Neurociências; Psicoterapia.

Resumen

La intolerancia a la lactosa afecta a millones de personas en todo el mundo, impactando negativamente la calidad de vida debido a síntomas gastrointestinales no deseados. Los tratamientos convencionales, como la restricción dietética y la suplementación enzimática, no abordan las posibles influencias emocionales y psicológicas en la manifestación de esta condición. Este estudio tiene como objetivo investigar la aplicación de la regresión y actualización de memoria mediante el método RB7 en el tratamiento de la intolerancia a la lactosa, analizando si la intervención psicológica puede modular las respuestas fisiológicas de los pacientes. Se seleccionaron 42 participantes con diagnóstico confirmado de la condición, de los cuales 36 completaron el protocolo. El tratamiento consistió en cuatro sesiones individuales de hipnoterapia, centradas en la identificación y resignificación de memorias asociadas con respuestas adversas al consumo de lactosa. La evaluación de los síntomas se realizó antes y después de la intervención, así como en un seguimiento a seis meses. Los resultados indicaron una reducción significativa en la frecuencia e intensidad de los síntomas, además del mantenimiento de los efectos terapéuticos a lo largo del período de seguimiento. Los hallazgos sugieren que la actualización de memorias puede desempeñar un papel fundamental en la respuesta fisiológica a la intolerancia alimentaria, abriendo nuevas perspectivas para enfoques terapéuticos integrativos. Se necesitan estudios adicionales para comprender los mecanismos subyacentes y explorar su aplicabilidad a otras condiciones gastrointestinales y psicosomáticas.

Palabras clave: Intolerancia a la lactosa; Hipnosis; Consolidación de la Memoria; Medicina Psicosomática; Neurociencias; Psicoterapia.

1. Introduction

Lactose intolerance is a condition characterized by the partial or complete inability to digest lactose, a disaccharide found in milk and dairy products. This impairment results from a deficiency in the enzyme lactase, which hydrolyzes lactose into its constituent monosaccharides, glucose and galactose, for intestinal absorption (Lomer et al., 2008). The reduction in

lactase activity can occur primarily, as a physiological decline over the lifespan, or secondarily, due to intestinal disorders, infections, or mucosal inflammation (Misselwitz et al., 2019).

The clinical symptoms of lactose intolerance include abdominal distension, pain, flatulence, and diarrhea, triggered by bacterial fermentation of undigested lactose in the colon (He et al., 2020). Although not a life-threatening condition, these symptoms can significantly impact quality of life, leading many individuals to completely avoid dairy products and adopt restrictive diets, often without professional guidance. Such dietary restrictions may result in nutritional deficiencies, particularly in calcium and vitamin D, increasing the risk of osteoporosis and other metabolic disorders (Shaukat et al., 2010).

Conventional treatments for lactose intolerance rely on dietary lactose restriction, lactase enzyme supplementation, and, in some cases, the consumption of fermented dairy products containing probiotic microorganisms that aid in lactose digestion (Misselwitz et al., 2019). However, these interventions primarily focus on symptom management and fail to address potential underlying causes of intolerance. Recent studies suggest that emotional and psychosocial factors may play a significant role in food sensitivity, influencing both digestive responses and the perception of gastrointestinal symptoms (Varjú et al., 2019).

The interaction between emotional processes, past memories, and physical manifestations has been extensively discussed in the literature. Biopsychosocial models propose that past experiences can shape the body's response to certain foods, potentially through the activation of the hypothalamic-pituitary-adrenal (HPA) axis and the regulation of the enteric nervous system (Slopen et al., 2013; Danese & McEwen, 2012). This raises an important question: Should a patient's past always be considered when treating physical conditions? If past traumas and experiences can influence bodily functions, could this response be modified through memory reinterpretation?

This study aims to investigate the application of memory regression and updating using the RB7 method in treating lactose intolerance, analyzing whether psychological intervention can modulate patients' physiological responses. The findings may provide new insights into the mind-body interaction, broadening the scope of therapeutic approaches for conditions traditionally regarded as strictly physiological.

2. Methods

Quantitative research was carried out concerning using Likert scale that allows the conversion of qualitative data into quantitative data (Pereira et al., 2018) using descriptive statistics with mean values, standard deviations, absolute frequency and relative percentual frequencies (Shitsuka et al., 2014) and statistical analysis (Vieira, 2021; Cohen, 1988). This study respected ethical and legal issues, with participants signing the Free and Informed Consent Form (FICF) and it was approved by the institution's Ethics Committee.

2.1 Sample and Inclusion Criteria

This study initially included a sample of 42 participants, of whom 36 completed all stages of the protocol. All individuals had been previously diagnosed with lactose intolerance through laboratory tests, ensuring objectivity in sample selection. The inclusion criteria required participants to be between 18 and 60 years old, exhibit recurrent symptoms related to lactose ingestion, and not be undergoing pharmacological or dietary treatments for lactose intolerance during the study period.

2.2 Intervention Protocol

Participants underwent the RB7 method, a structured protocol for memory regression and updating. The process was conducted by certified hypnotherapists and consisted of four individual sessions, each lasting approximately 60 minutes. The method followed these steps:

- 1. Pre-Talk: A preparatory discussion to align expectations, explain the method, and prepare the patient.
- 2. Initial Induction: Application of the physiological sigh technique to promote focus and internal connection.
- **3.** Guided Regression: Identification and access to referential memories associated with past experiences of physical and emotional discomfort.
- 4. Chronological Organization: Structuring accessed memories into a coherent timeline.
- **5.** Memory Updating: Reinterpretation based on truth and resilience, using cognitive and emotional reframing techniques.
- **6.** Neuroplastic Consolidation: Application of Long-Term Potentiation (LTP) to strengthen new interpretations and adaptive responses.

2.3 Assessment Instruments

To measure the effects of the intervention, participants completed a standardized questionnaire before the first session and after the last. The questionnaire included self-report scales to assess gastrointestinal symptom intensity, quality of life impact, and perceived improvement. The assessment included:

- A Likert scale (0 to 10) evaluating the intensity of symptoms such as abdominal distension, cramps, flatulence, and diarrhea.
- Open-ended questions to describe the subjective experience of symptoms before and after treatment.
- Quality of life assessment, considering emotional and social aspects before and after the intervention.

Statistical analysis was performed to determine significant changes between the pre- and post-intervention periods, comparing mean scores from the scales and applying appropriate statistical tests to assess the significance of observed differences.

Of the 42 participants initially recruited, 36 completed all stages of the RB7 protocol (91.7% women and 8.3% men). Participants' ages ranged from 21 to 60+ years, with balanced distribution among the 21–29, 30–39, and 40–49 age groups, and lower representation in the 50–59 and 60+ age groups. Approximately 80% of participants had experienced lactose intolerance symptoms for over six years, indicating that the condition was chronic in a significant portion of the sample.

2.4 Quantitative Results

Statistical analyses were conducted using SPSS software, version 18, while graphical representations were created using Microsoft Excel. A descriptive analysis was performed on 10 applied scales, covering 36 participants. The results are presented in the following graphs. Next, Figure 1 shows the frequency chart of discomfort level:



Figure 1 - Frequency chart of discomfort level pre- and post-intervention.

Source: Survey data.

Before the intervention, 75% of participants (n = 27) reported experiencing a high level of discomfort (scores above 8). After the intervention, this proportion decreased to 22.2%. Next, Figure 2 shows the frequency chart of anxiety level:





Source: Survey data.

In the pre-intervention phase, 47.2% of participants (n = 17) had scores above 8. Following the intervention, this percentage decreased to 16.7% (n = 6). Next, Figure 3 shows the frequency chart of stress level:





Source: Survey data.

Initially, 38.9% (n = 14) of participants reported high stress levels (scores above 8). After the intervention, only 16.7% (n = 6) remained at this level. Additionally, 61.1% of the sample reported low stress levels (scores below 3) following the intervention. Next, Figure 4 shows the frequency chart of food restriction level:



In the pre-intervention phase, 50% (n = 18) of participants reported high levels of dietary restriction (scores above 8). After the intervention, this percentage decreased to 22.2% (n = 8). Next, Figure 5 shows the frequency chart of Lactose Consumption:







High lactose consumption (scores above 8) was reported by 36.1% (n = 13) of participants in the pre-intervention phase and 55.6% (n = 20) in the post-intervention phase. The absence of a statistically significant difference between these time points suggests that lactose consumption was not directly impacted by the intervention. Next, Figure 6 shows the frequency chart of confidence level:





Source: Survey data.

Before the intervention, 19.4% (n = 7) of participants reported a high level of confidence (score > 8). After the intervention, this proportion significantly increased to 69.4% (n = 25). Next, Figure 7 shows the frequency chart of Emotional well-being:



Figure 7 - Frequency chart of emotional well-being pre- and post-intervention

Initially, only 11.1% (n = 4) of participants assigned high scores (above 8) to their well-being. However, in the postintervention phase, this proportion increased significantly to 72.2% (n = 26). Next, Figure 8 shows the frequency chart of need for supplements:



Figure 8 - Frequency chart of need for supplements pre- and post-intervention.

Source: Survey data.

The need for supplementation decreased from 55.6% (n = 20) in the pre-intervention phase to 11.1% (n = 4) in the post-intervention phase. Next, Figure 9 shows the frequency chart of intolerance severity:



Figure 9 - Frequency chart of intolerance severity pre- and post-intervention.

There was a significant reduction in the perceived severity of food intolerance, decreasing from 63.9% (n = 23) in the pre-intervention phase to 22.2% (n = 8) in the post-intervention phase. Next, Figure 10 shows the frequency chart of quality of life:



Figure 10 - Frequency chart of quality of life pre- and post-intervention.

In the pre-intervention phase, only 8.3% (n = 3) of participants reported high quality of life (score > 8). After the intervention, this number increased to 69.4% (n = 25), indicating a positive impact of the intervention.

Table 1 presents a comparison of the mean values of key indicators before and after the intervention, including standard deviations (SD), 95% confidence intervals (CI), percentage variation, and paired-sample t-test statistics. Additionally, p-values and effect size measures (Cohen's d) are provided to assess the robustness and significance of the findings.

The statistical analysis of ordinal data, such as Likert scales, has been a topic of debate regarding the choice between parametric and non-parametric methods. Parametric methods assume a normal distribution of data, while non-parametric methods are more flexible. Evidence suggests that when sample sizes exceed 15 and have similar distributions, parametric tests can be robust and even more discriminative. Furthermore, transforming data into binary scores can enhance visual interpretation without compromising statistical validity (Mircioiu & Atkinson, 2017).

Given these considerations, the paired-sample t-test was selected to analyze differences between pre- and postintervention measurements. This test is widely used for comparing means in repeated-measures studies, where participants are assessed before and after an intervention.

The paired t-test formulation follows the logic of statistical inference, with the following hypotheses:

- Null hypothesis (H₀): There is no difference between the means of the two conditions, i.e., $\mu_1 \mu_2 = 0$.
- Alternative hypothesis (H₁): There is a significant difference between the means, which may be two-tailed (μ₁ μ₂ ≠ 0) or one-tailed (μ₁ μ₂ > 0 or μ₁ μ₂ < 0).

The t-statistic was calculated based on the differences between paired observations and compared to a critical value from the t-distribution, considering a 5% significance level ($\alpha = 0.05$). p-values below 0.05 indicate statistically significant differences.

Cohen's d is a standardized measure used to quantify the magnitude of the observed effect. In the context of the paired-sample t-test, Cohen's d is calculated as:

$$d = \frac{t}{\sqrt{\lambda}}$$

Where:

- t is the t-statistic obtained from the paired-sample t-test.
- N is the number of paired observations (number of participants in the study).

2.5 Interpretation of Cohen's d

The interpretation of Cohen's d follows the classification proposed by Cohen (1988):

- Small Effect (d ≈ 0.2) Small magnitude of the difference between means.
- Medium Effect (d ≈ 0.5) Moderate difference between means.
- Large Effect ($d \ge 0.8$) Large and potentially practically significant difference.

Metric	Pre-Treatment Mean (SD, 95% CI)	Post-Treatment Mean (SD, 95% CI)	Mean Pre-Post Difference (SD, 95% CI)	Statistic (t, p- value)	Cohen's d	Variatio n (%)
Discomfort Level	7,94 (±2,12; 7,23–8,66)	4,36 (±3,05; 3,33–5,39)	(-3,59) (±4,26; -5,02– -2,14)	(-5,04 - <0,05)	-0,84	-45,10
Anxiety Level	6,94 (±2,57; 6,07–7,82)	3,81 (±3,00; 2,79–4,82)	(-3,12) (±4,22; -4,56– -1,71)	(-4,45 - <0,05)	-0,74	-45,20
Stress Level	6,08 (±2,66; 5,18–6,99)	3,94 (±3,06; 2,91–4,98)	(-2,13) (±4,31; -3,59– -0,68)	(-2,97 - 0,01)	-0,50	-35,16
Dietary Restriction Level	6,33 (±2,71; 5,41–7,25)	4,11 (±2,94; 3,11–5,11)	(-2,22) (±4,21; -3,64– -0,79)	(-3,167 - <0,05)	-0,53	-35,09
Lactose Consumption Frequency	5,83 (±2,94; 4,84–6,83)	6,74 (±6,81; 5,82–7,79)	0,97 (±3,67; -0,27–2,21)	1,58 - 0,12	0,263	16,67
Confidence Level	4,86 (±2,30; 4,08–5,64)	7,53 (±2,40; 6,71–8,34)	2,66 (±3,40; 1,51–3,81)	4,69 - <0,05	0,782	54,86
Emotional Well-Being	4,42 (±2,18; 3,68–5,16)	8,06 (±2,05; 7,36–8,75)	3,63 (±3,00; 2,62–4,65)	7,26 - <0,05	1,21	82,39
Need for Supplements	6,56 (±3,70; 5,30–7,81)	2,81 (±2,94; 1,81–3,80)	(-3,75) (±3,71; -5,00– -2,49)	(-6,05 - <0,05)	-1,01	-57,20
Severity of Intolerance	7,39 (±2,53; 6,53–8,25)	4,39 (±3,12; 3,33–5,45)	(-3,00) (±4,32; -4,46– -1,53)	(-4,16 - <0,05)	-0,69	-40,60
Quality of Life	5,06 (±1,92; 4,40–5,71)	7,69 (±2,61; 6,81–8,58)	2,63 (±3,65; 1,40–3,87)	4,33 - <0,05	0,72	52,20

Table 1 - Comparison of pre- and post-treatment means, standard deviations (SD), 95% confidence intervals (CI), paired t-test,

 Cohen's d, and percentage variation.

Source: Created by the Authors.

The largest mean reductions were observed in the following scales:

- Need for Supplementation: 57.20% reduction (d = -1.01, large effect).
- Anxiety Level: 45.20% reduction (d = -0.74, moderate effect).
- Discomfort Level: 45.10% reduction (d = -0.84, large effect).

The greatest mean increases were observed in:

- Emotional Well-Being: 82.39% increase (d = 1.21, large effect).
- Confidence Level: 54.86% increase (d = 0.78, moderate effect).
- Quality of Life: 52.20% increase (d = 0.72, moderate effect).

Meanwhile, lactose consumption frequency showed a 16.67% variation, but this change was not statistically significant (p = 0.12, d = 0.26). This suggests that participants did not significantly modify their lactose intake, even in cases of complaints, possibly due to the use of enzyme supplements.

2.6 Participant Testimonials

To complement the quantitative findings, we gathered testimonials from eight participants, offering a qualitative perspective on the effects of the RB7 method. Here are some of their experiences:

Participant 01:

"Good morning! I retook the lactose intolerance test last week, and while the lab results were pretty much the same as before the sessions, my body reacted completely differently. I drank pure milk and only had some mild bloating, which passed quickly. Now, I can eat dairy without any major discomfort. My quality of life has improved so much, and I'm incredibly grateful!"

Participant 02:

"On Saturday, I went to a birthday party and ate a cheese-filled sandwich without fear. Before, I would always have intense abdominal pain for days after, but now I only felt a slight discomfort."

Participant 03:

"After years of dealing with gas, cramps, and diarrhea every time I ate dairy, the hypnotherapy sessions made a huge difference. Now, I can enjoy ice cream and milk without having to rush to the bathroom immediately. My symptoms have improved so much, and it's made my daily life so much easier."

Participant 04:

"At first, I was skeptical, but after the sessions, I managed to overcome my fear. During a family dinner, I ate pizza without any bad reactions. I felt normal again, and I can't even put into words how grateful I am for this transformation."

Participant 05:

"I'm doing great! Even though I gained a few extra pounds during the healing process, I'm working on that now. The improvement in my quality of life has given me so much hope and energy."

Participant 06:

"Thanks to the hypnosis technique, I can confidently say I'm cured. I hadn't had chocolate milk in years because of my intolerance, and now I can enjoy it without any issues. I'll be forever grateful."

Participant 07:

"My lactose intolerance improved significantly, and because of that, my relationships have also changed. I feel so much lighter and more at peace, without constantly worrying about having a bad reaction after eating something with lactose."

Participant 08:

"I originally sought treatment for my food issues, but I ended up resolving deep-seated feelings of rejection and abandonment from my childhood. Today, I feel a level of confidence and inner peace that I never thought was possible."

2.7 Integration of findings and follow-up

The integration of quantitative and qualitative data provides strong evidence that the RB7 protocol not only alleviates the physical symptoms of lactose intolerance but also significantly enhances the psychological well-being of participants. The reduction in discomfort, anxiety, stress, and dietary restrictions, along with the decreased need for supplementation, combined with increased confidence, emotional well-being, and quality of life, highlights the potential of integrative approaches that consider both mind and body.

Furthermore, a six-month follow-up revealed that these improvements were sustained over time, with participants

reporting consistent symptom relief and lasting benefits in their quality of life. This long-term stability reinforces the profound impact of the memory-updating mechanism underlying the RB7 method.

3. Discussion

The findings of this study indicate that memory updating may play a crucial role in the physiological response to lactose intolerance. Previous research has suggested that memories are not fixed entities, but rather susceptible to modification throughout life (Schwabe et al., 2014). Studies demonstrate that memory reconsolidation can be influenced by new experiences, altering its future expression (Lee, Nader & Schiller, 2017). In the clinical context, memory updating has been associated with the reduction of symptoms in emotional disorders and physiological conditions related to stress (Speer et al., 2021).

Additionally, studies suggest that childhood adversity is associated with the development of chronic diseases in adulthood, including inflammatory and gastrointestinal disorders (Slopen et al., 2013). Early adverse experiences can sensitize the hypothalamic-pituitary- adrenal (HPA) axis, increasing the body's vulnerability to physiological conditions (Danese & McEwen, 2012). This relationship reinforces the hypothesis that emotional memories can impact physical health throughout life, modulating the body's response to different stimuli, including food.

If past memories influence lactose intolerance, what other diseases might have similar roots?

If past memories are linked to lactose intolerance, it is plausible to consider that other gastrointestinal conditions, such as irritable bowel syndrome (IBS) or even inflammatory bowel diseases, could also be influenced by past emotional experiences. Studies indicate that hypnosis has been effective in reducing symptoms of IBS, decreasing visceral pain and improving intestinal function (Whitehead, 2006; Palsson et al., 2002). Furthermore, chronic conditions such as migraines, dermatological conditions like atopic eczema, and certain forms of chronic pain may, in part, have roots in traumatic memories or significant emotional stress episodes. Future studies could explore the generalization of these

mechanisms and investigate whether interventions that modify memories could help alleviate symptoms across various chronic conditions.

Should Conventional Medicine Further Investigate the Relationship Between Emotional Experiences and Physical Illnesses?

Yes, the growing body of evidence indicating that emotional factors and past memories directly influence physiologysuggests that conventional medicine could greatly benefit from a more integrative approach. Research in neuroscience and psychology has already demonstrated that chronic stress and trauma can alter immune, endocrine, and gastrointestinal responses. Recent studies have shown that hypnotherapy can be effective in reducing symptoms of functional gastrointestinal disorders, such as irritable bowel syndrome (IBS), providing long-term relief for many patients (Schäfert et al., 2014; Black et al., 2020). Incorporating psychological assessments and therapies focused on memory reconsolidation into medical practice could offer more comprehensive treatments, moving beyond symptom management to address the underlying causes of diseases.

If a Treatment Based on Regression and Memory Updating Can Resolve a Biological Condition Like Lactose Intolerance, Does This Indicate That We Are Advancing Not Only in Prevention But Also in the Resolution of Many Physical Conditions?

The findings of this study suggest that psychological interventions can modify physiological response patterns that

were previously considered fixed or purely biological. This represents a significant advancement toward a more personalized and holistic approach to medicine. By focusing on emotional causes and past experiences, we can not only prevent the emergence of new symptoms but also resolve pre-existing physical conditions. This is a crucial step toward expanding clinical practice, introducing innovative approaches that consider the complex interplay between mind and body. Such progress has the potential to transform not only how we treat specific conditions but also how we understand health and healing as a whole.

4. Conclusion

The results of this study provide robust evidence that memory updating through the RB7 method can positively impact the physiological response to lactose intolerance. The sustained improvement in symptoms reported by participants, even six months after the intervention, suggests that the reconsolidation of past experiences may play a relevant role in regulating the body's response to certain foods.

These findings raise fundamental questions about the connection between emotional memories and chronic diseases. If lactose intolerance can be modulated through hypnotherapy and memory updating, it is plausible that other gastrointestinal and physiological conditions may also have emotional roots that could be addressed through similar approaches. Conventional medicine could greatly benefit from integrating therapeutic strategies that consider not only physical symptoms but also psychological and emotional factors that influence patient health.

Future studies should explore this mind-body interaction in greater depth, evaluating the impact of memory reconsolidation on other chronic diseases and psychosomatic conditions. Additionally, further investigations with larger samples and controlled methodologies could strengthen our understanding of the role of memories in the manifestation and resolution of physical disorders.

Thus, this study not only demonstrates the effectiveness of the RB7 method in modulating the symptoms of lactose intolerance but also opens new possibilities for understanding and treating various clinical conditions through the lens of the intricate connection between mind and body.

Acknowledgments

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