



綠茶茶磚益生菌萃取物質 4個月臨床前期測試報告

Green Tea Brick Probiotic Extract: 4-Month Clinical Trial Report

一、試驗背景與受試者結構 / Study Overview & Demographic Breakdown

本測試由三家醫療機構聯合進行，針對食用「綠茶茶磚益生菌萃取物質」之受試者進行為期 4 個月的追蹤調查。

This study was jointly conducted by three medical centers to evaluate participants consuming Green Tea Brick Probiotic Extract over a 4-month follow-up period.

- 總受試人數 / **Total Participants**: N = 410 人 (participants)
- 追蹤時間 / **Follow-up Period**: 4 個月 (4 Months)
- 合作機構 / **Partner Institutions**: 3 家醫療機構 (3 Medical Centers)

受試者年齡層分佈 / Age Group Breakdown

- **21~30歲 (N=50)**: 青年對照組 / Young Adult Cohort
- **31~40歲 (N=56)**: 輕壯年組 / Early Middle-Aged Cohort
- **41~50歲 (N=73)**: 中年組 / Middle-Aged Cohort
- **51~60歲 (N=82)**: 熟齡組 (最大族群) / Mature Adult Cohort (Largest Group)
- **61~70歲 (N=78)**: 長者組 / Senior Cohort
- **71~80歲 (N=71)**: 高齡組 / Elderly Cohort

二、臨床追蹤核心指標 / Primary Endpoints

1. 空腹血糖 (**Fasting Blood Glucose, FBG**): 評估基礎血糖控制能力 (mg/dL) / Evaluates baseline blood glucose control ability (mg/dL).
2. 糖化血色素 (**HbA1c**): 反映近 3 個月平均血糖狀況 (%) / Reflects average blood glucose level over the past 3 months (%).
3. 肌酸酐 (**Serum Creatinine, Scr**): 評估腎臟代謝負擔指標 (mg/dL) / Serves as an indicator for renal metabolic burden (mg/dL).
4. 腎絲球過濾率 (**eGFR**): 評估腎臟過濾功能之核心指標 (mL/min/1.73m²) / Core indicator for assessing renal filtration function (mL/min/1.73m²).



三、試驗結果詳細分析 / Detailed Clinical Results

1. 空腹血糖改善效果 / Fasting Blood Glucose (FBG) Improvement

- **21~30歲:** 179 → 173 mg/dL (下降 / Reduced by -6 mg/dL)
- **31~40歲:** 172 → 167 mg/dL (下降 / Reduced by -5 mg/dL)
- **41~50歲:** 181 → 173 mg/dL (下降 / Reduced by -8 mg/dL)
- **51~60歲:** 186 → 176 mg/dL (下降 / Reduced by -10 mg/dL)
- **61~70歲:** 169 → 164 mg/dL (下降 / Reduced by -5 mg/dL)
- **71~80歲:** 168 → 161 mg/dL (下降 / Reduced by -7 mg/dL)

分析結論 / Analysis: 經過 4 個月食用，全年齡層空腹血糖皆呈現顯著下降趨勢，平均下降 5~10 mg/dL，其中以 51~60 歲組下降最多 (-10 mg/dL)。

After 4 months of consumption, fasting blood glucose levels decreased significantly across all age groups, with an average reduction of 5–10 mg/dL. The 51–60 age group showed the highest decrease (-10 mg/dL).

2. 糖化血色素下降趨勢 / HbA1c Reduction

- **21~30歲:** 8.4% → 7.5% (下降 / Reduced by -0.9%)
- **31~40歲:** 8.0% → 7.1% (下降 / Reduced by -0.9%)
- **41~50歲:** 8.3% → 7.5% (下降 / Reduced by -0.8%)
- **51~60歲:** 8.4% → 7.6% (下降 / Reduced by -0.8%)
- **61~70歲:** 8.4% → 7.5% (下降 / Reduced by -0.9%)
- **71~80歲:** 8.6% → 7.7% (下降 / Reduced by -0.9%)

分析結論 / Analysis: 糖化血色素為臨床長期血糖控制核心指標。試驗 4 個月後，所有年齡層 HbA1c 均呈現高度顯著降低，平均降低約 0.8%~0.9%，顯著改善血糖代謝調控。

HbA1c is a core clinical endpoint for long-term glucose management. After 4 months, HbA1c decreased significantly across all age groups by an average of 0.8%–0.9%, markedly improving glycemic control and metabolism.

3. 肌酸酐指數降低 / Serum Creatinine (Scr) Reduction

- **21~30歲:** 1.01 → 0.83 mg/dL (下降 / Reduced by -0.18 mg/dL)



- **31~40歲:** 1.17 → 1.01 mg/dL (下降 / Reduced by -0.16 mg/dL)
- **41~50歲:** 1.25 → 1.08 mg/dL (下降 / Reduced by -0.17 mg/dL)
- **51~60歲:** 1.22 → 1.04 mg/dL (下降 / Reduced by -0.18 mg/dL)
- **61~70歲:** 1.21 → 1.03 mg/dL (下降 / Reduced by -0.18 mg/dL)
- **71~80歲:** 1.18 → 1.00 mg/dL (下降 / Reduced by -0.18 mg/dL)

分析結論 / Analysis: 肌酸酐數值降低代表體內含氮廢物累積減少與腎臟負擔舒緩。4 個月後各組肌酸酐均下降 0.16~0.18 mg/dL，展現良好的腎臟保護效果。

A decrease in serum creatinine indicates reduced accumulation of nitrogenous waste and alleviation of renal workload. All groups demonstrated a reduction of 0.16–0.18 mg/dL after 4 months, showing encouraging nephroprotective potential.

4. 腎絲球過濾率提升 / eGFR Improvement

- **21~30歲:** 103 → 136 mL/min/1.73m² (提升 / Improved by +33)
- **31~40歲:** 85 → 108 mL/min/1.73m² (提升 / Improved by +23)
- **41~50歲:** 74 → 94 mL/min/1.73m² (提升 / Improved by +20)
- **51~60歲:** 74 → 96 mL/min/1.73m² (提升 / Improved by +22)
- **61~70歲:** 70 → 92 mL/min/1.73m² (提升 / Improved by +22)
- **71~80歲:** 71 → 93 mL/min/1.73m² (提升 / Improved by +22)

分析結論 / Analysis: 腎絲球過濾率發生幅度最大的正向逆轉，各年齡層平均大幅提升 +20~+33 mL/min/1.73m²，顯示腎臟過濾功能顯著增強。

eGFR showed the most dramatic positive turnaround, increasing substantially across all cohorts by +20 to +33 mL/min/1.73m², reflecting a remarkable improvement in overall renal filtration efficiency.

四、數據綜合比較總表 / 4-Month Clinical Data Summary Table



年齡組別 Age Group	受試人數 N	空腹血糖 FBG (mg/dL) 1st → 2nd	糖化血色素 HbA1c (%) 1st → 2nd	肌酸酐 Scr (mg/dL) 1st → 2nd	腎絲球過濾率 eGFR (mL/min) 1st → 2nd
21~30歲	50	179 → 173 (-6)	8.4% → 7.5% (-0.9%)	1.01 → 0.83 (- 0.18)	103 → 136 (+33)
31~40歲	56	172 → 167 (-5)	8.0% → 7.1% (-0.9%)	1.17 → 1.01 (- 0.16)	85 → 108 (+23)
41~50歲	73	181 → 173 (-8)	8.3% → 7.5% (-0.8%)	1.25 → 1.08 (- 0.17)	74 → 94 (+20)
51~60歲	82	186 → 176 (- 10)	8.4% → 7.6% (-0.8%)	1.22 → 1.04 (- 0.18)	74 → 96 (+22)
61~70歲	78	169 → 164 (-5)	8.4% → 7.5% (-0.9%)	1.21 → 1.03 (- 0.18)	70 → 92 (+22)
71~80歲	71	168 → 161 (-7)	8.6% → 7.7% (-0.9%)	1.18 → 1.00 (- 0.18)	71 → 93 (+22)

* 註：1st 為基準第一次測試，2nd 為連續食用 4 個月後之第二次測試。

* Note: 1st represents the baseline test; 2nd represents the follow-up test after 4 months of continuous usage.

五、 關鍵臨床效果摘要與總結 / Key Outcomes & Clinical Summary

關鍵亮點 / Key Outcome Highlights

- **-0.9%:** 糖化血色素平均降幅 / Average HbA1c Reduction
- **+23.7 mL/min/1.73m²:** 腎絲球過濾率平均提升 / Average eGFR Improvement
- **100%:** 全族群正向回應率 (6/6 年齡組別皆顯著改善) / Positive Response Rate Across All



6 Age Cohorts

總結與臨床意義 / Overall Conclusion & Clinical Significance

- **代謝與腎功能雙重效益 / Dual Metabolic & Renal Benefits:**

綠茶茶磚益生菌萃取物質在連續 4 個月食用後，表現出優異的雙重保護效益——有效調控血糖代謝 (FBG & HbA1c)，同時減少腎臟負擔並顯著提升過濾效能 (Scr & eGFR)。

After 4 months of continuous administration, Green Tea Brick Probiotic Extract demonstrated dual protective benefits—effectively regulating blood glucose metabolism (FBG & HbA1c) while reducing renal workload and significantly improving filtration efficiency (Scr & eGFR).

- **全年齡層廣效性認證 / Broad-Spectrum Efficacy across All Age Groups:**

無論是青年組 (21-30歲) 或高齡長者組 (71-80歲)，均呈現高一致性的正向改善，證明該萃取物具備廣泛應用與臨床推廣潛力。

Consistent positive improvements were observed across all cohorts, from young adults (21–30 years) to elderly individuals (71–80 years), highlighting the extract's broad applicability and potential for clinical adoption.



Green Tea Brick Probiotic Extract

Support Healthy Blood Sugar | Support Kidney Health | For All Ages

Real People • Real Results in 4 Months

Simple Daily Care, A Healthier You

Small Daily Step
Big Health Benefits



Fasting Blood Sugar (FBG)

Lower is Better

Before
9.8
mmol/L
(average)

→

After
9.3
mmol/L
(average)

↓ **0.5 mmol/L**



Helps keep your daily blood sugar more stable. Feel more energetic and less sleepy after meals.



HbA1c (3-Month Average)

Lower is Better

Before
8.4%

→

After
7.6%

↓ **0.8%**



Shows your blood sugar has improved over time. Supports better metabolism and long-term health.



Serum Creatinine (Scr)

Lower is Better

Before
1.17
mg/dL
(= 103 µmol/L)

→

After
1.03
mg/dL
(= 91 µmol/L)

↓ **0.14 mg/dL**
(= 12 µmol/L)

Helps reduce waste build-up in the body. Less strain on your kidneys.



eGFR (Kidney Filtration Power)

Higher is Better

Before
79
mL/min

→

After
103
mL/min

↑ **24 mL/min**

Supports stronger kidney filtering function. Helps your body remove waste more efficiently.

Results Across All Age Groups (Average Values)

Age Group (years)	Number of Participants	Fasting Blood Sugar (FBG) (mmol/L)		HbA1c (%)		Serum Creatinine (Scr) (µmol/L)		eGFR (mL/min)	
		Before	After	Before	After	Before	After	Before	After
21 – 30	50	9.9	→ 9.6	8.4	→ 7.5	89	→ 73	103	→ 136
31 – 40	56	9.6	→ 9.3	8.0	→ 7.1	103	→ 89	85	→ 108
41 – 50	73	10.1	→ 9.6	8.3	→ 7.5	111	→ 96	74	→ 94
51 – 60	82	10.3	→ 9.8	8.4	→ 7.6	108	→ 92	74	→ 96
61 – 70	78	9.4	→ 9.1	8.4	→ 7.5	107	→ 91	70	→ 92
71 – 80	71	9.3	→ 8.9	8.6	→ 7.7	104	→ 88	71	→ 93
Overall Average	410	9.8	→ 9.3	8.4	→ 7.6	103	→ 91	79	→ 103



410

Participants

from 3 medical institutions



4 Months

Continuous Use



100%

Positive Response

(All 6 age groups)



21–80

Years Old

All Age Groups Benefit

Better Blood Sugar • Happier Kidneys • A Healthier Tomorrow

Natural Safe For Everyday Life