



RESEARCH ARTICLE

Tissue-engineered edible bird's nests (TeeBN)

Supplementary File

Table S1. The sequences of primers for polymerase chain reactions (PCR).

	Forward (5' - 3')	Reverse (5' - 3')
GAPDH	AACGACCCCTTCATTGAC	TCCACGACATACTCAGCAC
α SMA	GAGCGTGAGATTGTCCGTGA	GGTGCTGGGTGCGAGG
Ki67	ATCATTGACCGCTCCTTTAGGT	GCTCGCCTTGATGGTTCCT
CK18	CAGCCAGCGTCTATGCAGG	CCTTCTCGGTCTGGATTCCAC
AQP5	AGAAGGAGGTGTGTTTCAGTTGC	TAATGGCCGGATTGATGTGGC

All are mouse primer resources from PrimerBank.

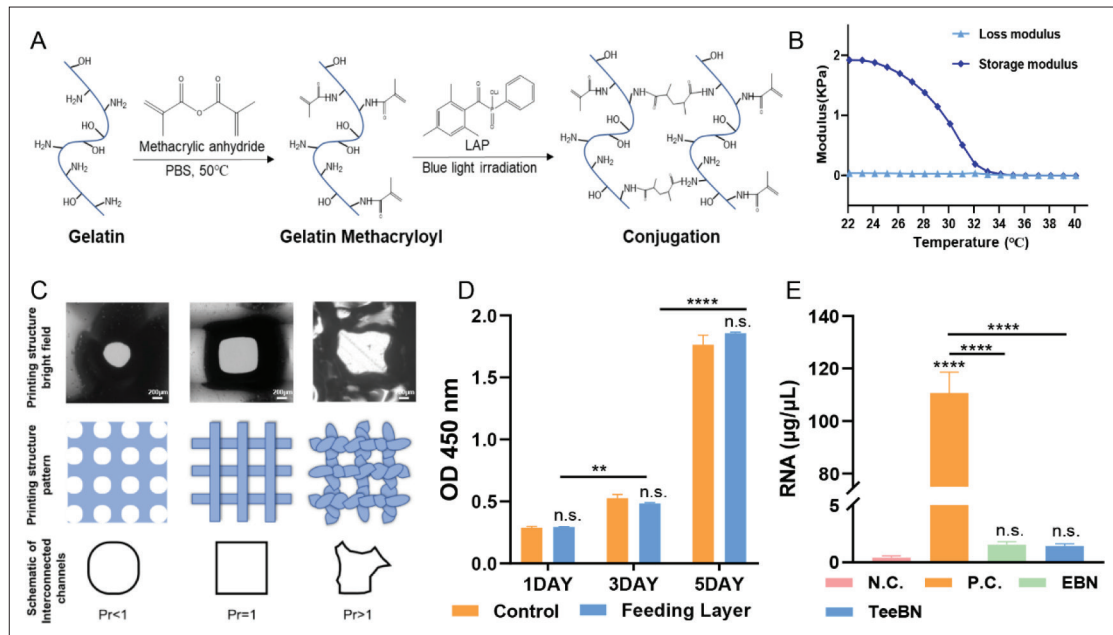


Figure S1. Supplementary data for the preparation and evaluation of the feeding layer of TeeBN. (A) Scheme of preparing GelMA. (B) The temperature sweep test. (C) The bright field of different Pr values and corresponding structural pattern and schematic of interconnected channels, scale bar, 200 μm . (D) Cell viability of epithelial cells in feeding layer. $**P < 0.01$, $****P < 0.0001$, and n.s. means not significant ($n = 3$). All results were analyzed with two-way ANOVA and Tukey's post-hoc multiple comparisons tests in GraphPad Prism 8. Results of Control vs. Feeding layer are shown in 1, 3, and 5 days, and 3 days vs. 1 day, 5 days vs. 3 days of feeding layer. (E) The concentration of RNA. $****P < 0.0001$ and n.s. means not significant ($n = 3$). All results were analyzed with one-way ANOVA and Tukey's post-hoc multiple comparisons tests in GraphPad Prism 8. N.C. is negative control group and P.C. is positive control group. Results shown are P.C. vs. N.C., EBN vs. N.C., TeeBN vs. N.C., EBN vs. P.C., and TeeBN vs. P.C.

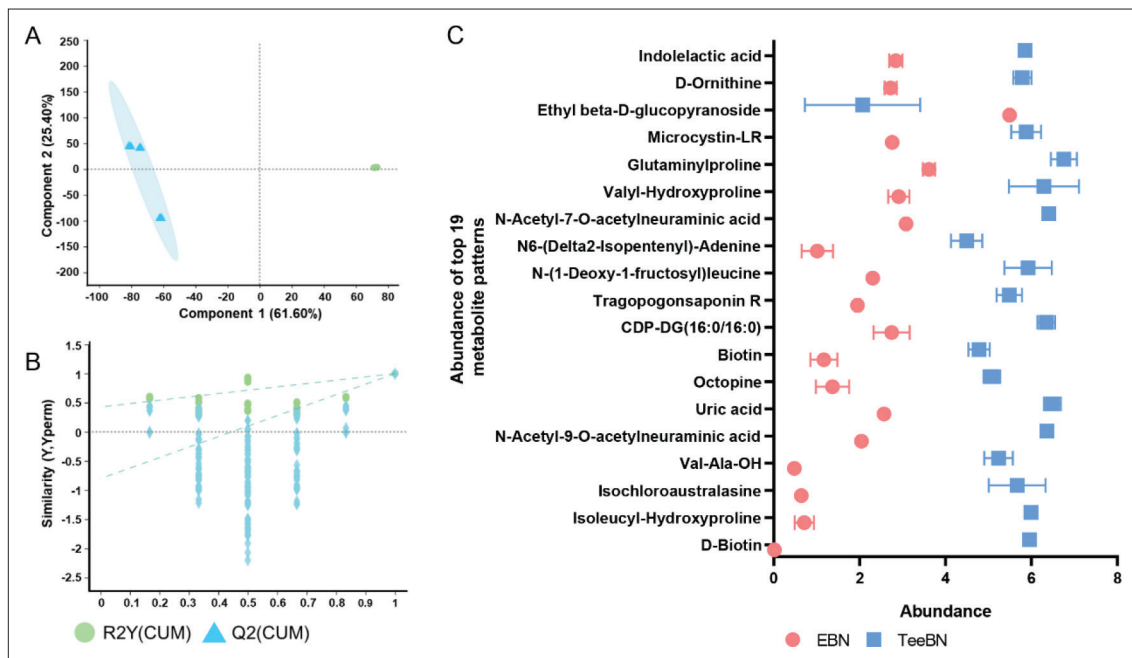


Figure S2. Supplementary data for the metabolic profile analysis of one natural EBN product from Indonesia and TeeBN. (A) Partial least squares-discriminate analysis (PLS-DA) of metabolites in EBN and TeeBN. (B) Validation plot of 200 permutation tests for the PLS-DA model. (C) Quantification comparison of the abundance of top 19 discriminating metabolites in TeeBN and EBN. All results were analyzed with paired *t*-tests in GraphPad Prism 8 ($n = 6$). Results shown are TeeBN vs. EBN.

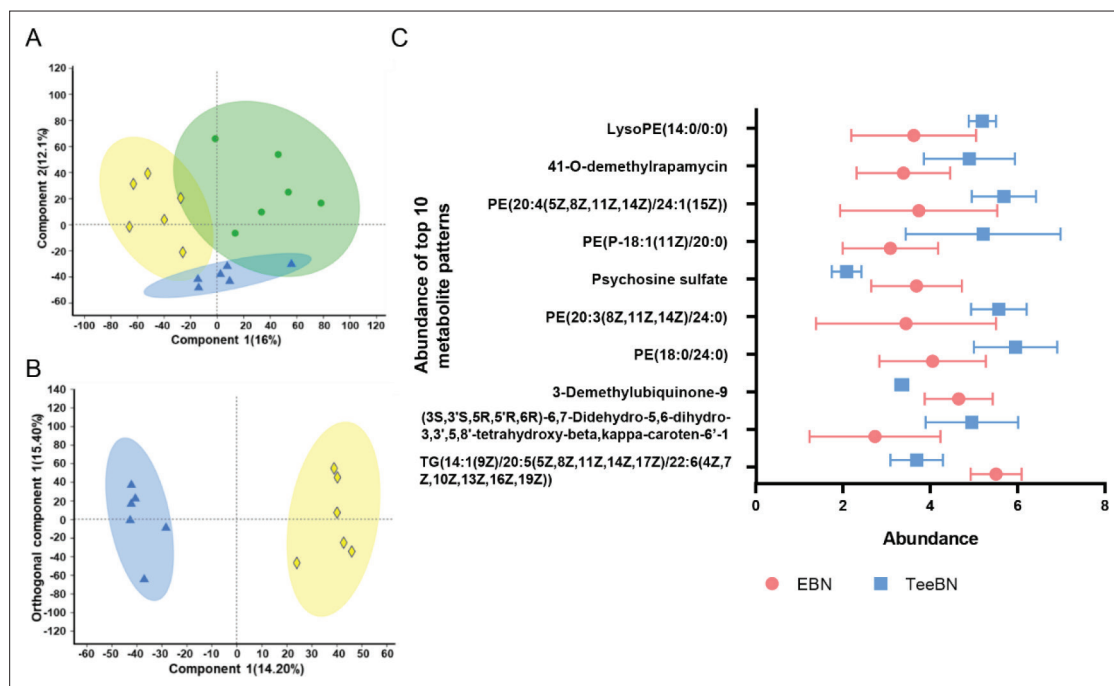


Figure S3. Supplementary data for the serum metabolic profile analysis of one natural EBN product from Indonesia and TeeBN. (A) Partial least squares-discriminate analysis of serum metabolic profile. (B) Orthogonal partial least squares-discriminate analysis of serum metabolic profile. (C) Quantification comparison of the abundance of top 10 discriminating metabolites in EBN and TeeBN group. All results were analyzed with paired *t*-tests in GraphPad Prism 8 (*n* = 6). Results shown are TeeBN vs. EBN.