Table S1. Research design of raw material composition and temperature process

Sample formulation	w/%		t(extrusion)/°C
	Black-eyed bean	Skimmed milk	
1	10	0.5	
2	15	0.5	
3	20	0.5	
4	10	1.0	
5	15	1.0	50
6	20	1.0	
7	10	1.5	
8	15	1.5	
9	20	1.5	
10	10	0.5	
11	15	0.5	
12	20	0.5	
13	10	1.0	
14	15	1.0	70
15	20	1.0	
16	10	1.5	
17	15	1.5	
18	20	1.5	
19	10	0.5	
20	15	0.5	
21	20	0.5	
22	10	1.0	
23	15	1.0	90
24	20	1.0	
25	10	1.5	
26	15	1.5	
27	20	1.5	

Table S2. Scoring criteria for organoleptic analysis

Parameter	Criterion	Score
Aroma	Very pleasant	4
	Pleasant	3
	Quite pleasant	2
	Unpleasant	1
Texture (compared with conventional rice)	Very similar	4
	Similar	3
	Different	2
	Very different	1
Taste	Very tasteful	4
	Tasteful	3
	Quite tasteful	2
	Untasteful	1
Colour	Very interesting	4
	Interesting	3
	Uninteresting	2
	Very uninteresting	1