

Table1 Raw data of TAOC of UF and CF with optimal strain combinations							
		Absorbance			Viable count [lg (CFU/mL)]		
UF		0.257	0.269	0.265	104.9417	109.8417	108.2083
CF		0.315	0.307	0.309	128.6250	125.3583	126.1750

Table2 Raw data of viable count of UF and CF with optimal strain combinations						
	Colony number			Viable count [lg (CFU/mL)]		
UF	70*10 ⁴	48*10 ⁴	102*10 ⁴	5.8451	5.6812	6.0086
CF	15*10 ⁷	17*10 ⁷	13*10 ⁷	8.1761	8.2304	8.1139

Table 3 Raw data of determine TFC, TPC, TPAC, and average degree of polymerization of TPAC.								
	TFC		TPC		TPAC		Average degree of polymerization of TPAC	
	Absorbance	Content (mg/100 mL)	Absorbance	Content (mg/100m L)	Absorbance	Content (mg/100 mL)	Amount of proanthocyanidin substance	Average degree of polymerization
0	0.364	57.23992589	0.498	40.7252329	0.676	45.55212355	0.063323758	2.478219623
	0.343	53.99768411	0.486	39.52318942	0.652	43.6988417	0.061107057	2.463635206
	0.347	54.61525398	0.501	41.02574376	0.654	43.85328185	0.061291783	2.464890866
8	0.343	53.99768411	0.479	38.8219974	0.652	43.6988417	0.061107057	2.463635206
	0.354	55.69600124	0.48	38.92216769	0.656	44.00772201	0.061476508	2.466138981
	0.331	52.14497453	0.457	36.61825103	0.669	45.01158301	0.062677221	2.474072399
16	0.314	49.52030261	0.393	30.2073525	0.552	35.97683398	0.051870803	2.389449276
	0.297	46.89563069	0.406	31.50956626	0.554	36.13127413	0.052055528	2.391190986
	0.308	48.59394782	0.42	32.91195032	0.542	35.2046332	0.050947178	2.380551268
24	0.304	47.97637795	0.414	32.31092858	0.51	32.73359073	0.047991577	2.349776079
	0.306	48.28516288	0.423	33.21246118	0.535	34.66409266	0.05030064	2.374128233
	0.324	51.06422727	0.424	33.31263147	0.535	34.66409266	0.05030064	2.374128233
32	0.339	53.38011425	0.474	38.32114595	0.596	39.37451737	0.055934755	2.425109482
	0.338	53.22572178	0.47	37.92046479	0.613	40.68725869	0.057504918	2.437537391
	0.343	53.99768411	0.47	37.92046479	0.599	39.60617761	0.056211843	2.427353093
41	0.338	53.22572178	0.44	34.91535611	0.563	36.82625483	0.052886791	2.398878118
	0.339	53.38011425	0.452	36.11739958	0.557	36.36293436	0.052332616	2.393780498
	0.325	51.21861973	0.446	35.51637784	0.552	35.97683398	0.051870803	2.389449276

Table 4 Raw data of organic acid content.

Tartaric acid		Malic acid		Lactic acid		Citric acid	
Peak area	Content (mg/100mL)	Peak area	Content (mg/100mL)	Peak area	Content (mg/100mL)	Peak area	Content (mg/100mL)
360360	54.2904895	2615775	663.6964859	508008	154.7281649	157581	54.32107183
0 387403	58.67511494	2614468	663.3647951	513355	156.3861344	153880	53.04233981
402316	61.09303895	2528258	641.4863984	539152	164.3851318	156330	53.88883899
334722	50.13366419	2158044	547.5333913	755601	231.5004931	146463	50.47969312
8 376536	56.91319043	2179685	553.0254501	767315	235.1327083	160468	55.31855882
374661	56.6091867	2136070	541.9568238	747065	228.8536953	157138	54.16801096
219805	31.50155974	372206	94.32295019	1142927	351.6004909	91572	31.51431095
16 252626	36.82300304	374103	94.80437135	1146537	352.7198606	104709	36.05327408
258011	37.69610174	353953	89.69069901	1169391	359.8063081	88470	30.44253934
219561	31.46199872	111482	28.15634434	1552175	478.4979466	71829	24.69290962
24 214956	30.71536557	107700	27.19654737	1593047	491.1713202	71170	24.46521862
218800	31.33861374	107109	27.04656324	1566817	483.0380606	70842	24.35189138
255881	37.35075351	202500	51.25491651	1885710	581.9187157	100719	34.67468971
32 277254	40.81607168	168060	42.51472418	1871295	577.4489887	116495	40.12545339
291915	43.19313759	158019	39.96651654	2138830	660.4048267	98717	33.98297895
273815	40.25848832	146531	37.05108885	2274934	702.6072353	81307	27.96765215
41 271996	39.96356417	141549	35.78675557	2260554	698.148361	81393	27.997366
268467	39.39138863	183868	46.52648261	2145078	662.3421735	92547	31.85118307

Table 5 Raw data of amino acid content.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
HIS	22.833	19.483	13.302	14.244	14.678	14.133	15.724	15.922	14.784	27.362	20.555	16.626	14.433	13.684	13.370	14.555	15.160	17.501
OHPRO	2.293	1.661	0.611	1.009	1.147	0.879	1.364	1.392	1.569	1.336	1.998	1.470	1.204	1.562	1.766	2.805	1.965	1.766
ARG	23.885	19.078	12.170	16.240	13.680	14.798	20.104	16.458	17.545	26.644	22.864	24.275	15.566	16.109	18.501	21.122	21.785	20.035
ASN	600.416	589.790	298.530	386.521	383.002	363.809	449.639	454.749	443.154	484.917	494.506	469.316	458.942	442.923	466.271	500.083	477.740	497.356
TAU	4.128	3.841	2.766	2.930	3.085	2.944	3.468	3.176	4.182	3.714	3.992	3.612	3.107	3.848	3.166	4.677	4.520	3.994
GLN	71.442	70.823	41.450	61.059	54.824	62.024	84.928	85.054	92.920	83.671	85.972	86.928	68.181	67.180	65.251	68.061	72.748	66.107
SER	78.535	78.262	47.913	60.170	57.599	62.867	63.574	55.526	61.717	77.998	59.561	45.521	37.692	39.284	39.183	42.853	42.752	50.587
ETH	45.131	46.008	26.645	38.079	37.305	40.483	44.826	44.396	45.634	43.673	44.141	43.441	41.527	42.405	42.585	57.859	56.236	52.493
GLY	43.058	39.480	33.109	43.200	40.476	42.811	62.148	58.573	60.879	96.010	85.445	75.665	81.035	82.215	83.012	121.897	117.719	116.068

ASP	63.836	62.312	36.864	51.762	52.129	51.144	39.878	39.975	42.924	35.407	29.296	28.733	16.186	16.234	15.873	16.100	15.920	16.020
CIT	3.035	2.112	1.426	2.430	2.036	2.555	3.060	1.956	2.082	19.628	6.382	2.729	2.364	2.539	1.940	3.731	3.023	5.567
GLU	700.636	677.392	398.979	527.302	509.009	527.801	592.814	583.502	608.424	594.993	570.349	588.661	524.769	554.242	536.129	679.805	685.412	655.186
beta-ALA	11.376	9.576	6.073	9.174	8.032	9.024	11.995	11.144	10.514	10.188	10.634	8.939	8.965	9.254	10.234	12.813	11.762	11.930
THR	47.034	45.649	27.666	36.205	34.533	35.570	32.776	30.880	32.446	30.675	24.142	22.147	15.533	15.625	15.713	18.994	17.844	19.704
ALA	121.746	112.834	70.849	86.859	81.509	85.727	63.760	59.946	62.675	53.004	49.119	42.683	34.467	33.804	34.838	45.931	43.536	46.092
gamma-GABA	803.987	784.116	450.988	650.511	635.285	656.036	731.550	720.821	739.845	722.892	698.055	715.288	646.833	637.842	658.975	821.829	821.384	800.590
AMADP	0.635	0.640	0.250	0.436	0.413	0.455	0.485	0.531	0.550	0.463	0.484	0.608	0.426	0.386	0.433	0.538	0.567	0.532
PRO	3500.74	3427.66	2077.67	2771.47	2679.28	2814.51	3327.89	3150.18	3262.14	3148.28	3121.32	3273.81	3119.84	3094.87	2930.98	3868.50	3860.49	3610.69
	2	3	1	5	0	6	3	5	8	7	8	5	1	8	9	2	4	2
beta-GABA	2.464	3.930	1.006	1.943	1.389	1.991	2.171	4.035	2.141	2.289	3.456	2.283	2.064	2.066	2.140	2.599	2.603	2.569
ORN	3.642	3.234	5.835	2.172	2.658	2.659	5.002	3.310	2.736	6.428	4.589	2.808	4.412	3.171	3.466	4.864	3.693	5.990
LYS	19.697	19.265	12.003	14.588	14.584	14.926	20.948	21.208	22.116	29.882	24.182	24.958	22.628	22.782	21.729	29.404	27.538	25.655
alpha-GABA	0.495	0.479	0.154	0.425	0.385	0.514	0.328	0.403	0.469	0.248	0.159	0.249	0.039	0.141	0.117	0.214	0.225	0.170
TYR	10.956	9.749	6.776	5.165	5.045	5.342	0.448	0.000	0.000	4.797	1.814	0.242	0.426	0.287	0.209	0.495	0.070	1.452
MET	3.339	3.344	2.198	2.371	2.318	2.282	0.459	0.392	0.381	1.082	0.498	0.384	0.448	0.440	0.418	0.445	0.406	0.515
VAL	42.175	39.053	23.853	29.116	28.782	29.631	24.076	22.721	23.526	13.395	10.352	8.613	5.412	5.430	5.227	7.833	7.060	8.489
ILE	21.636	20.182	12.611	13.836	12.940	13.795	6.179	5.477	5.701	4.968	3.017	1.445	1.272	1.129	1.060	2.015	1.638	2.738
LEU	28.334	26.477	15.930	19.157	18.862	19.167	11.736	11.963	12.085	8.366	6.044	4.183	3.884	4.038	3.842	6.791	6.464	7.264
PHE	14.511	13.307	8.457	8.182	7.802	8.013	0.694	0.383	0.363	3.825	1.534	0.402	0.729	0.600	0.577	1.048	0.750	1.623
TRP	13.400	12.238	7.437	10.503	9.705	9.726	11.294	11.028	11.967	11.173	10.204	9.718	7.417	8.047	7.980	8.090	7.522	7.834

Table6 Raw data of in vitro digestion assay.

		E-CF	E-SCF	E-UF	N-CF	N-SCF	N-UF
TPC	O-2	868	941.5	823.2	875	991.9	880.2
		852	882	885.4	822	789.4	860.1
		802	675.5	820.4	834	795.7	854.6
	G-120	1934	1326.8	1332.6	1061	995.7	1088.8

		1754	1440.3	1180.2	860	962	1225.8
		2077	1399.9	1153.2	844	1165.4	961.4
	I-120	3932	3181.1	2102.3	1743	1266.2	848.5
		4138	3186.2	2324.6	1685	1209.8	789.8
		4231	2869.7	2074.2	1530	1238	1070.7
ABTS	O-2	361.5	489	536.5	515.4	515	543.2
		410.4	429	465.8	545.5	515	558.8
		452.1	506	506.7	382.1	577	575
	G-120	2368.1	2179	2128.7	2459.8	2206	2010.5
		2226.8	2213	2193.4	2288.4	2143	2100.8
		2284.1	2216	2172.9	2316.8	2157	2158.7
	I-120	6932.9	6362	6069	6749	5764	5138.1
		6953.6	6626	6164.1	6026.8	5730	5287.6
		6969.5	6499	6036.9	6259.2	5742	5399.3
FRAP	O-2	6421.2	6168	7099.6	5437.4	5406	4984.5
		4377.1	6891	5730.9	4434	5088	5549.4
		4377.1	5873	5880.5	4672.6	4442	4571.1
	G-120	7909.9	4652	5098.2	5252.5	4063	4359.4
		8192.9	6771	5222.2	4441.3	5527	5955.3
		6718.2	5928	4688.6	6167.2	5417	4331.4
	I-120	14660.8	12555	10223.8	15192.3	12406	8013.8
		14290.5	12388	9386.5	13815.8	10681	9990.5
		16372.8	12841	10788.7	14864	12380	9193.7
TFC	O-2	427.3	438	468.9	427.7	436	407.6
		414.9	460	442.6	452	424	441.8
		441.8	439	450.5	437.3	423	422.5
	G-120	690.9	515	329.9	261.4	266	250.8
		649.8	521	326.4	230.9	238	221.4
		684.3	487	357.7	308.7	220	220.8
	I-120	814.4	695	574.6	653	505	454.5
		766.8	670	553.4	697.1	507	434.6
		773.7	632	636	674.9	523	412.9

Table 7 Raw data of body weight and food intake of rats.

Group	Initial weight	Final weight	Weight gain/g	food intake/g
Control	215.3	313.9	98.6	667
	205.9	266.2	60.3	667
	175.6	379.1	203.5	764.3
	202.3	378.2	175.9	764.3
	205.9	375.7	169.8	764.3
	191.4	369.4	178	764.3
CF	170.4	309.7	139.3	720.3
	203.3	409.8	206.5	720.3
	210.9	448.1	237.2	720.3
	212.3	373.6	161.3	747.4
	217.4	415.7	198.3	747.4
	209.7	411.4	201.7	747.4
SCF	197.7	391.9	194.2	684.4
	168.8	345.4	176.6	684.4
	196.5	334.4	137.9	684.4
	215.6	381.2	165.6	701.9
	204.6	396	191.4	701.9
	210	308	98	701.9
UF	206.6	370.2	163.6	650.2
	198.4	292.5	94.1	650.2
	213.5	345.2	131.7	650.2
	164.9	338.6	173.7	650.2
	218.4	338.6	120.2	683.2
	214.6	306.4	91.8	683.2