Back to article

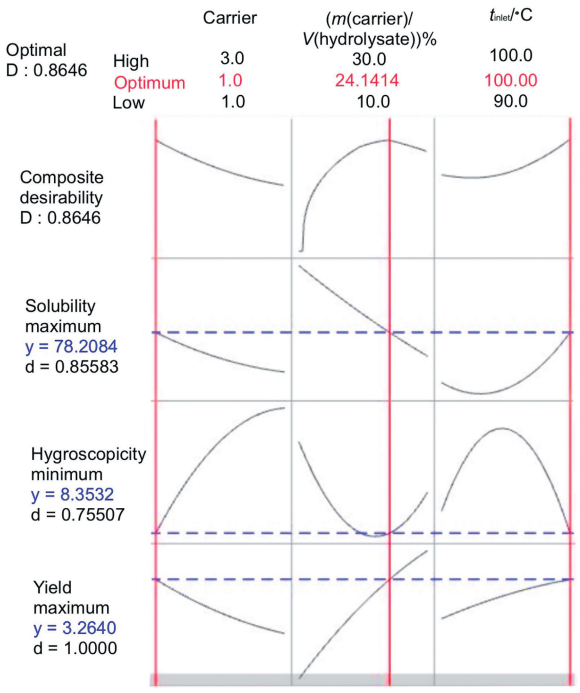

Fig. S1. The desirability of the responses. D=desirability, Carrier 1.0=maltodextrin

Back to article

Table S1. Experimental data for the optimization using response surface methodology

Run	Carrier	(*m*(carrier)/ *V*(hydrolysate))/%	t_{inlet}/°C	*Y*(EFPH)/%	Hygroscopicity/%	Solubility/%
1	2	10	100	1.394	12.185	78.684
2	1	10	95	0.505	11.710	76.084
3	2	30	90	0.694	11.080	75.920
4	1	20	100	2.353	12.450	79.692
5	3	20	100	1.403	10.900	74.713
6	3	20	90	1.858	4.525	75.403
7	2	20	95	2.117	12.810	75.043
8	2	20	95	1.633	11.525	74.609
9	1	20	90	2.384	10.465	74.713
10	3	10	95	3.264	20.155	69.403
11	3	30	95	0.489	14.155	76.880
12	1	30	95	2.951	8.680	74.027
13	2	30	100	2.981	10.305	74.963
14	2	10	90	0.931	14.600	74.217
15	2	20	95	2.052	13.815	70.547

Carrier 1=maltodextrin, carrier 2=maltodextrin and gum Arabic, carrier 3=gum Arabic, EFPH=encapsulated fish protein hydrolysate

Back to article

Table S2. Regression equation of each response

Response/%	Regression equation
Yield	$y=1.93-0.147x_1+0.126x_2+0.284x_3+0.18(x_1)^2-0.317(x_2)^2-0.119(x_3)^2-1.311x_1x_2-0.107x_1x_3-0.457x_2x_3$
Hygroscopicity	$y=12.72+0.80x_1-1.80x_2+0.65x_3-0.75(x_1)^2+1.71(x_2)^2-2.38(x_3)^2-0.74x_1x_2+1.10x_1x_3+0.41x_2x_3$
Solubility	$y=73.40-1.014x_1+0.425x_2+0.975x_3+0.44(x_1)^2+0.26(x_2)^2+2.29(x_3)^2+2.383x_1x_2-1.418x_1x_3-1.356x_2x_3$

Back to article

Table S3. Prediction and actual value of each response

Response/%	Prediction	Actual	PI_{low}	PI_{high}
Hygroscopicity	8.35	7.66	5.37	22.08
Solubility	78.21	76.20	71.39	85.03
Yield	3.28	3.07	0.9628	5.585

PI=prediction interval in the range of 95 %