

This thesis is dedicated

**...to my beloved parents, Mrs Anju Kumari and
Honorary Captain Dilip Kumar Singh**

...brothers, Venkateshwar Kumar and Gyaneshwar Kumar

DECLARATION

The candidate certifies the thesis entitled “**Development of dietary fiber enriched functional food from green pea peel**” is being submitted to School of Engineering, Tezpur University in partial fulfillment for the award of the degree of Doctor of Philosophy in the Department of Food Engineering and Technology is a record of a bonafide research work accomplished by me under the supervision of **Professor S. C. Deka** and co- supervision of **Dr. Amit Baran Das**

All assistance received from various sources has been appropriately acknowledged. No part of thesis has been submitted elsewhere for award of any other degree.

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List of Tables

Table No.	Title	Page No.
1.1	Studies related to the metabolic health benefits and functions of pea and its by-products	5
1.2	Nutritional components of pea and pea peel	7
1.3	Pea nutritional bioactive constituents and their effects on human health	10
1.4	Phytochemicals and antioxidants content of pea and pea peel	12
1.5	Functional properties of pea peel	15
2.1	Experimental design	42
2.2	Peleg's model parameters	44
2.3	Physiochemical properties of the dietary fiber	46
2.4	Functional and thermal properties of ADF, UDF and ODF dietary fiber	47
3.1	Brunauer–Emmett–Teller surface area of pea peel (<i>Pisum sativum</i> L.) insoluble dietary fiber (IDF) by extrusion treatment (E1, E2, E3) and enzymes (M1, M2, M3)	68
3.2	Thermal properties of insoluble dietary fiber of pea peel (<i>Pisum sativum</i> L.) by extrusion treatment (E1, E2, E3) and enzymes (M1, M2, M3)	69
3.3	Effects of modification of insoluble dietary fiber (IDF) of pea peel (<i>Pisum sativum</i> L.) by extrusion treatment (E1, E2, E3) and enzymes (M1, M2, M3) on the physical and functional properties	72
3.4	Color value of yogurt fortified with modified and unmodified insoluble dietary fiber (IDF) of pea peel (<i>Pisum sativum</i> L.)	74
3.5	Dietary fiber content before and after modification treatment for pea peel	75
4.1	MRS media composition (1L)	83
4.2	Composition of simulated salivary fluid (SSF) at pH- 7.4	85
4.3	Composition of simulated intestinal fluid (SIF) at pH- 6.8	85
4.4	Composition of simulated gastric fluid (SGF) at pH- 2.1	85
4.5	<i>Lactobacillus rhamnosus</i> ATCC 7469, <i>Lactobacillus sakei</i> ATCC 15521, <i>Lactobacillus plantarum</i> ATCC 8014 and <i>Escherichia coli</i> ATCC 4157 growth at 0, 24 and 48h measured with OD at 600nm	87
4.6	Relative growth at OD at 600 nm and Prebiotic Index for <i>Lactobacillus rhamnosus</i> ATCC 7469, <i>Lactobacillus sakei</i> ATCC 15521, <i>Lactobacillus plantarum</i> ATCC 8014 and <i>Escherichia coli</i> ATCC 4157	88
4.7	Glucose concentration (μg) in simulated gastrointestinal model	93
4.8	Dietary fiber and inulin content (mg) in simulated gastrointestinal model	94

5.1	Viable count, degree of hydrolysis and incubation time of lactose-free yogurt with fiber during refrigerated storage	104
5.2	pH and TA (%) in control and fiber enriched lactose free yogurts over the storage period of 28 days at 4°C	105
5.3	Syneresis (%) in control and fiber enriched lactose free yogurts over the storage period of 28 days at 4°C	107
5.4	Color parameters of lactose free yogurt samples enriched with different ratio of pea peel fiber	108
5.5	Texture profile analysis of plain and fiber enriched yogurts over 28 days of storage at 4°C	100
5.6	Flow behaviour of the yogurts was determined using power law model	112
5.7	Organoleptic attributes of lactose free set type yogurts supplemented with different concentrations of modified and unmodified pea peel fiber	116

List of Figures

Figure No.	Title	Page No.
1.1	(a) Freshly obtained garden green peas, (b) Separation of green peas from its peel, (c) Green pea seeds, (d) Green pea peel or pea peels	2
2.1	Response surface plot representing effect of (a) amplitude and time for IDF, (b) NaOH and solid:liquid for IDF , (c) amplitude and time for TDF, and (d) NaOH and solid :liquid for TDF	43
2.2	Extraction behaviour of insoluble dietary fiber in different methods	45
2.3	FT-IR spectrum of ADF, UDF and ODF	48
2.4	Thermal decomposition of extracted ADF, UDF and ODF	49
2.5	Surface morphology of extracted (a) ADF, (b) UDF, and (c) ODF	50
3.1	Scanning electron microscopy images of unmodified (C) and modified insoluble dietary fiber of pea peel (<i>Pisum sativum L.</i>)	64
3.2	Fourier-transformed infrared spectroscopy of unmodified (C) and modified insoluble dietary fiber of pea peel (<i>Pisum sativum L.</i>)	66
3.3	X-ray diffraction patterns of unmodified (C) and modified insoluble dietary fiber of pea peel (<i>Pisum sativum L.</i>)	67
3.4	Thermal decomposition behaviour of unmodified (C) and modified dietary fiber of pea peel (<i>Pisum sativum L.</i>)	70
3.5	Glucose dialysis retardation index (GDRI) curve of insoluble dietary fiber (IDF) of pea peel (<i>Pisum sativum L.</i>)	73
3.6	Rheological curve of yogurt combined with modified and unmodified insoluble dietary fiber (IDF) of pea peel (<i>Pisum sativum L.</i>)	75
4.1	The growth kinetics of <i>Lactobacillus</i> spp., <i>L. rhamnosus</i> ATCC 7469 in glucose (c) and dietary fiber medium (d) for 30 h experiment. The glucose and DF utilization was presented in (a) or (b)	91
5.1	Flow curves (shear stress vs. shear rate) of lactose free set type yogurt enriched with pea peel modified and unmodified dietary fiber	112
5.2	Frequency sweep rheograms by changes of G' and G'' of lactose free set type yogurt (a) storage modulus and (b) loss	113

modulus

5.3	SEM of lactose free set type yogurt enriched with modified and unmodified dietary fiber from pea peel	115
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List of Abbreviations

DF	Dietary fiber
IDF	Insoluble dietary fiber
UDF	Unmodified insoluble dietary fiber
MDF	Modified insoluble dietary fiber
I	Inulin
IB	Inulin with <i>L. rhamnosus</i> bacteria
DFB	Dietary fiber with <i>L. rhamnosus</i> bacteria
RCF	Relative centrifugal force
NS	Nelson-Somogyi method
DNS	Dinitrosalicylic method
GFDF	Glucose free dietary fiber
+G	Glucose-free MRS media
-G	Glucose-free MRS media
+I	Media with inulin
NB	Nutrient broth
OD	Optical density
RG	Relative growth
PI	Prebiotic index
SSF	Simulated Salivary Fluid
SGF	Simulated Gastric Fluid
SIF	Simulated Intestinal Fluid
I-Phase	Intestinal phase
G-Phase	Gastric phase
<i>Lactobacillus</i>	<i>LR</i>
<i>rhamnosus</i> ATCC	
7469	
<i>Lactobacillus sakei</i>	<i>LS</i>
ATCC 15521	
<i>Lactobacillus</i>	<i>LP</i>
<i>plantarum</i> ATCC	
8014	
<i>Escherichia coli</i>	<i>E. coli</i>
ATCC 4157	