Publications:

A novel Dual Amylin and Calcitonin Receptor Agonist (DACRA), KBP-089, induces weight loss through a reduction in fat, but not lean mass, while improving food preference
Publication: Research - peer-review › Journal article – Annual report year: 2017

A safflower oil-based high fat/high-sucrose diet modulates the gut microbiota and liver phospholipid profiles associated with early glucose intolerance in the absence of tissue inflammation
Publication: Research - peer-review › Journal article – Annual report year: 2016

A study of associations between early DHA status and fatty acid desaturase (FADS) SNP and developmental outcomes in children of obese mothers
Publication: Research - peer-review › Journal article – Annual report year: 2017

Dual Amylin and Calcitonin Receptor Agonists: A Novel Treatment for Obesity and Related Co-Morbidities
Publication: Research › Ph.D. thesis – Annual report year: 2017

Effects of Gliadin consumption on the Intestinal Microbiota and Metabolic Homeostasis in Mice Fed a High-fat Diet
Publication: Research - peer-review › Journal article – Annual report year: 2017

Environmental spread of microbes impacts the development of metabolic phenotypes in mice transplanted with microbial communities from humans
Publication: Research - peer-review › Journal article – Annual report year: 2016

Fatty acid composition and phospholipid types used in infant formulas modifies the establishment of human gut bacteria in germ-free mice
Publication: Research - peer-review › Journal article – Annual report year: 2017

Gene expression profiling in persons with multiple chemical sensitivity before and after a controlled n-butanol exposure session
Publication: Research - peer-review › Journal article – Annual report year: 2017

Interactions between host metabolism, immune regulation, and the gut microbiota in diet-associated obesity and metabolic dysfunction
Publication: Research › Ph.D. thesis – Annual report year: 2017

Optimization of tolerability and efficacy of the novel dual amylin and calcitonin receptor agonist KBP-089 through dose escalation and combination with a GLP-1 analog
Publication: Research - peer-review › Journal article – Annual report year: 2017

Supplementation of docosahexaenoic acid (DHA), vitamin D₃ and uridine in combination with six weeks of cognitive and motor training in prepubescent children: a pilot study
Publication: Research - peer-review › Journal article – Annual report year: 2017

Do very small adipocytes in subcutaneous adipose tissue (a proposed risk factor for insulin insensitivity) have a fetal origin?
Publication: Research - peer-review › Journal article – Annual report year: 2016

Fish oil supplementation from 9 to 18 months of age affects the insulin-like growth factor axis in a sex-specific manner in Danish infants
Human gut microbes impact host serum metabolome and insulin sensitivity

Plasma acylcarnitine profiling indicates increased fatty acid oxidation relative to tricarboxylic acid cycle capacity in young, healthy low birth weight men

Plasma amino acid levels are elevated in young, healthy low birth weight men exposed to short-term high-fat overfeeding

Regulation of host metabolism and immunity by the gut microbiome

The Dual Amylin- and Calcitonin-Receptor Agonist KBP-042 Increases Insulin Sensitivity and Induces Weight Loss in Rats with Obesity

Adaptation of Lactococcus lactis to high growth temperature leads to a dramatic increase in acidification rate

Emulsifying triglycerides with dairy phospholipids instead of soy lecithin modulates gut lipase activity: Emulsifying triglycerides with dairy phospholipids

Gliadin affects glucose homeostasis and intestinal metagenome in C57BL6 mice fed a high-fat diet

Gliadin intake alters intestinal microbiota, glucose and lipid metabolism, and adipose tissue and liver immune cells

Hand eczema and stratum corneum ceramides

Lipid hydrolysis products affect the composition of infant gut microbial communities in vitro.

Long-chain polyunsaturated fatty acids in breast-milk and erythrocytes and neurodevelopmental outcomes in Danish late-preterm infants

Multiple Chemical Sensitivity: Baseline cytokine profiling and characterization of airway immunological response and gene expression profiling upon chemical exposure

Obesity-associated fecal microbiota from human modulates body mass and metabolites in mice

Plasma phospholipid very-long-chain saturated fatty acids: a sensitive marker of metabolic dysfunction or an indicator of specific healthy dietary components?
Pregnancy induces an insulin resistance promotin hepatic ceramide phenotype in mice
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2015

Reduced ex vivo stimulated IL-6 response in infants randomized to fish oil from 9 to 18 months, especially among PPARG2 and COX2 wild types
Publication: Research - peer-review › Journal article – Annual report year: 2015

The effect of a short-term high-fat overfeeding on plasma levels of acylcarnitines in young, healthy men with low or normal birth weight
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2015

The effect of maternal Inflammation on foetal programming of metabolic disease
Publication: Research - peer-review › Journal article – Annual report year: 2015

Whey-reduced weight gain is associated with a temporary growth reduction in young mice fed a high-fat diet
Publication: Research - peer-review › Journal article – Annual report year: 2014

Acute and perinatal-programming effects of a fat-rich diet on rat muscle mitochondrial function and hepatic lipid accumulation.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Adipose tissue trans fatty acids and changes in body weight and waist circumference
Publication: Research - peer-review › Journal article – Annual report year: 2013

Effects of pregnancy on obesity-induced inflammation in a mouse model of fetal programming
Publication: Research - peer-review › Journal article – Annual report year: 2014

Effects on metabolic markers are modified by PPARG2 and COX2 polymorphisms in infants randomized to fish oil.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Environmental factors influencing neonatal immunity and development of diseases later in life
Publication: Research › Ph.D. thesis – Annual report year: 2015

Gliadin affects glucose homeostasis and intestinal metagenome in C57BL/6 mice fed and high-fat diet
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Phytol: A chlorophyll component with anti-inflammatory and metabolic properties
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Pre-natal undernutrition and post-natal overnutrition are associated with permanent changes in hepatic metabolism markers and fatty acid composition in sheep
Publication: Research - peer-review › Journal article – Annual report year: 2014

The effect of a short-term high-fat overfeeding on plasma levels of amino acids in young, healthy men with low or normal birth weight
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

The effect of a short-term high-fat overfeeding on plasma levels of amino acids in young, healthy men with low or normal birth weight
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014
Adipose tissue trans fatty acids and changes in body weight and waist circumference
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Content and distribution of phytanic acid diastereomers in organic milk as affected by feed composition
Publication: Research - peer-review › Journal article – Annual report year: 2013

Docosahexaenoic acid status at 9 months is inversely associated with communicative skills in 3-year-old girls
Publication: Research - peer-review › Journal article – Annual report year: 2013

Effect of gestation on obesity-induced hepatic and placental inflammation in mice
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Effects of butter from mountain-pasture grazing cows on risk markers of the metabolic syndrome compared with conventional Danish butter: a randomized controlled study.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Effects of maternal energy intake during gestation and lactation on leptin levels in the young and adult pups
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

FADS genotype and diet are important determinants of DHA status: a cross-sectional study in Danish infants
Publication: Research - peer-review › Journal article – Annual report year: 2013

Gestation reverses obesity-induced hepatic inflammation in mice
Publication: Research - peer-review › Journal article – Annual report year: 2013

Gestation reverses obesity-induced hepatic inflammation in mice
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Lipid hydrolysis products affect the composition of microbiota isolated from infant fecal samples after in vitro fermentation
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Lipid hydrolysis products affect the composition of microbiota isolated from infant fecal samples after in vitro fermentation
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Mapping Condition-Dependent Regulation of Lipid Metabolism in Saccharomyces cerevisiae.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Obesity-induced hepatic and placental inflammation are absent in obese gestating mice compared to control fed dams
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Offspring from rat mothers fed a high-fat/high-sucrose diet during gestation and lactation accumulate free fatty acids in the liver when exposed to high fat diet as adults.
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Perinatal programming of metabolic dysfunction and obesity-induced inflammation
Publication: Research › Ph.D. thesis – Annual report year: 2013

Phytanic acid stimulates glucose uptake in a model of skeletal muscles, the primary porcine myotubes
Publication: Research - peer-review › Journal article – Annual report year: 2013

Polymorphism in the fatty acid desaturase genes and diet are important determinants of infant n-3 fatty acid status.
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013
Polymorphisms in the fatty acid desaturase genes and diet are important determinants of infant docosahexaenoic acid status
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Pre- and early-postnatal nutrition modify gene and protein expressions of muscle energy metabolism markers and phospholipid fatty acid composition in a muscle type specific manner in sheep.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Whey protein reduces early life weight gain in mice fed a high-fat diet.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Ceramide profile in hypohidrotic ectodermal dysplasia
Publication: Research - peer-review › Journal article – Annual report year: 2012

Effects of Butter and Phytanic acid intake on metabolic parameters and T-cell polarization
Publication: Research › Ph.D. thesis – Annual report year: 2012

Fish intake, erythrocyte n-3 fatty acid status and metabolic health in Danish adolescent girls and boys
Publication: Research - peer-review › Journal article – Annual report year: 2011

Maternal high-fat/high-sucrose diet during lactation results in increased adipose tissue mass, and altered hepatic fatty acid metabolism at weaning
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Maternal high-fat/high-sucrose diet during lactation results in increased adipose tissue mass, and altered hepatic fatty acid metabolism at weaning
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Muscle ceramide content is similar after 3 weeks’ consumption of fat or carbohydrate diet in a crossover design in patients with type 2 diabetes
Publication: Research - peer-review › Journal article – Annual report year: 2012

A randomized controlled intervention with fish oil versus sunflower oil from 9 to 18 months of age: exploring changes in growth and skinfold thicknesses
Publication: Research - peer-review › Journal article – Annual report year: 2011

Effect of dairy fat on plasma phytanic acid in healthy volunteers - a randomized controlled study
Publication: Research - peer-review › Journal article – Annual report year: 2011

Effect of industrially produced trans fat on markers of systemic inflammation: evidence from a randomized trial in women
Publication: Research - peer-review › Journal article – Annual report year: 2011

Effects of Topical Corticosteroid and Tacrolimus on Ceramides and Irritancy to Sodium Lauryl Sulphate in Healthy Skin
Publication: Research - peer-review › Journal article – Annual report year: 2011

Fish oil combined with SCFA synergistically prevent tissue accumulation of NEFA during weight loss in obese mice
Publication: Research - peer-review › Journal article – Annual report year: 2011

"Good teaching practice" at DTU Systems Biology - sustaining quality in teaching and learning
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2011
Skin barrier response to occlusion of healthy and irritated skin: Differences in trans-epidermal water loss, erythema and stratum corneum lipids
Publication: Research - peer-review › Journal article – Annual report year: 2010

Stratum corneum lipids, skin barrier function and filaggrin mutations in patients with atopic eczema
Publication: Research - peer-review › Journal article – Annual report year: 2010

Validation of Cyanoacrylate Method for Collection of Stratum Corneum in Human Skin for Lipid Analysis
Publication: Research - peer-review › Journal article – Annual report year: 2010

Enzymatic Production of Ceramide
Publication: Research › Ph.D. thesis – Annual report year: 2009

Fedtstof-forskere samles om erstatning for transfedtsyrer
Publication: Communication › Journal article – Annual report year: 2009

Dansk-amerikansk forskningssamarbejde om sundhed og livsstilssygdomme
Publication: Communication › Journal article – Annual report year: 2008

Effect of gender on lipid-induced insulin resistance in obese subjects
Publication: Research - peer-review › Journal article – Annual report year: 2008

Fedtsyrebalancen påvirker livsstilssygdomme og allergi
Publication: Communication › Journal article – Annual report year: 2008

Fedtsyrebalance påvirker livsstilssygdomme og allergi
Publication: Research › Journal article – Annual report year: 2008

Influence of dietary fatty acids on endocannabinoid and N-acylethanolamine levels in rat brain, liver and small intestine
Publication: Research - peer-review › Journal article – Annual report year: 2008

Kinetic study of sphingomyelin hydrolysis for ceramide production
Publication: Research - peer-review › Journal article – Annual report year: 2007

Lipids and skin barrier function - a clinical perspective
Publication: Research - peer-review › Journal article – Annual report year: 2008

Phospholipase C-catalyzed sphingomyelin hydrolysis in a membrane reactor for ceramide production
Publication: Research - peer-review › Journal article – Annual report year: 2008

Butter-intake decreases ectopic lipid deposition and increase glucose tolerance, compared to highly polyunsaturated oil, in the rat
Publication: Research › Sound/Visual production (digital) – Annual report year: 2007

Enzymatic production of ceramide from sphingomyelin
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Enzymatic Production of Ceramide from Sphingomyelin
Publication: Research › Paper – Annual report year: 2007
Immobilization of phospholipase C for the production of ceramide from sphingomyelin hydrolysis
Publication: Research - peer-review › Journal article – Annual report year: 2006

Influence of dietary fatty acids on endocannabinoid and n-acylethanolamine levels in rat brain, small intestine and liver
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Komælk skal være endnu sundere
Publication: Communication › Journal article – Annual report year: 2007

Skin lipids: Presentation of a newly developed method for collection of human stratum corneum for lipid analysis
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Sphingomyelinase and ceramidase activities in human plasma
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007

The effect of combining weight loss and n-3 PUFA intake on obese and insulin resistant mice
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007

The potential of gut bacteria-matured DCs to activate CD4+ T cells highly depends on the lipid composition of the T cell membrane
Publication: Research › Sound/Visual production (digital) – Annual report year: 2007

The potential of gut bacteria-matured DCs to activate CD4+ T cells highly depends on the lipid composition of the T cell membrane
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2007

The source of dietary fatty acids alter the activity of secretory sphingomyelinase in the rat
Publication: Research - peer-review › Journal article – Annual report year: 2007

Lipids and stable isotopes in marine food webs in West Greenland: Trophic Relations and health implications
Publication: Research › Ph.D. thesis – Annual report year: 2006

Enzymatic production of ceramide from sphingomyelin
Publication: Research - peer-review › Journal article – Annual report year: 2006

Butter improves glucose tolerance compared with at highly polyunsaturated diet in the rat
Publication: Research › Paper – Annual report year: 2006

Butter-intake improves glucose tolerance, compared to a highly polyunsaturated oil, in the rat
Publication: Research › Sound/Visual production (digital) – Annual report year: 2006

Effects of dietary fatty acids on T-cell responses induced by dendritic cells
Publication: Research - peer-review › Poster – Annual report year: 2006

Enzymatic Modification of Sphingomyelin
Publication: Research › Sound/Visual production (digital) – Annual report year: 2006

Enzymatic Modification of Sphingomyelin
Publication: Research › Poster – Annual report year: 2006

Exploring Biosynthetic Control in Lipid Metabolism
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2006
The dietary fatty acid source regulates the activity of secretory sphingomyelinase, an enzyme involved in inflammatory signalling and atherogenesis
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Combinatorial effects of dietary fatty acids and probiotics on T-cell responses induced by dendritic cells
Publication: Research - peer-review › Poster – Annual report year: 2005

Enzymatic modification of sphingomyelin
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2005

Enzymatic Modification of Sphingomyelin
Publication: Research › Poster – Annual report year: 2005

Milk-derived GM(3) and GD(3) differentially inhibit dendritic cell maturation and effector functionalities
Publication: Research - peer-review › Journal article – Annual report year: 2005

Milk-derived GM3 and GD3 differentially inhibit dendritic cell maturation and effector functionalities
Publication: Research - peer-review › Journal article – Annual report year: 2005

Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2005

Sphingolipids in signal transduction and pathophysiology
Publication: Research › Sound/Visual production (digital) – Annual report year: 2005

A solid dietary fat containing fish oil redistributes lipoprotein subclasses without increasing oxidative stress in men
Publication: Research - peer-review › Journal article – Annual report year: 2004

Cultivar and year-to-year variation of phytosterol content in rye (Secale cereale L.)
Publication: Research - peer-review › Journal article – Annual report year: 2004

Effects of Dietary fatty acid modification in solid fats on blood lipids, lipoprotein subclasses, and oxidative stress in men
Publication: Research - peer-review › Journal article – Annual report year: 2004

Lipids rich in phosphatidylethanolamine from natural gas-utilizing bacteria reduce plasma cholesterol and classes of phospholipids: A comparison with soybean oil
Publication: Research - peer-review › Journal article – Annual report year: 2004

Sphingolipids in the human diet - occurrence and physiological effects
Publication: Research - peer-review › Journal article – Annual report year: 2002

Age-dependent variation in membrane lipid synthesis in leaves of garden pea (Pisum sativum L.)
Publication: Research - peer-review › Journal article – Annual report year: 2001
Effects of moderately enhanced levels of ozone on the acyl lipid composition and dynamical properties of plasma membranes isolated from garden pea (Pisum sativum)
Publication: Research - peer-review › Journal article – Annual report year: 2001

Fat Digestion and Absorption
Publication: Research - peer-review › Review – Annual report year: 2001

Occurrence of bioactive sphingolipids in meat and fish products
Publication: Research - peer-review › Journal article – Annual report year: 2001

The impact of different phytosterols on the molecular dynamics in the hydrophobic/hydrophilic interface phosphatidylcholine- liposomes
Publication: Research - peer-review › Journal article – Annual report year: 2001

Expression of barley serpin genes, cloning of wheat serpins, and a loop deletion in Arabidopsis thaliana serpin sequences
Publication: Research › Article in proceedings – Annual report year: 1999

A novel method in studies of dynamical properties in plant membrane: Laurdan fluorescence spectroscopy
Publication: Research - peer-review › Journal article – Annual report year: 1996

Plant membrane lipids; the impact of ozone on lipid composition, lipid metabolism and the dynamical properties of plasma membranes
Publication: Research › Ph.D. thesis – Annual report year: 1996

In situ leaf lipid metabolism in garden pea (Pisum sativum L.) exposed to moderately enhanced levels of ozone
Publication: Research - peer-review › Journal article – Annual report year: 1995

The leaf acyl composition of plants exposed to moderately enhanced levels of ozone: Species, age and dose dependence
Publication: Education › Book chapter – Annual report year: 1995

Effects of moderately enhanced levels of ozone on the acyl lipid composition of leaves of garden pea (Pisum sativum)
Publication: Research - peer-review › Journal article – Annual report year: 1994

Isolation of a putative vesicular intermediate in the cell-free transfer of membrane from transitional endoplasmatic reticulum to the Golgi apparatus of etiolated seedlings of garden pea
Publication: Research - peer-review › Journal article – Annual report year: 1993

ATP-dependent cell-free transfer of membrane lipids from nuclei to Golgi apparatus of germinating axes of garden pea
Publication: Research - peer-review › Journal article – Annual report year: 1992

ATP-induced budding of nuclear envelope in vitro
Publication: Research - peer-review › Journal article – Annual report year: 1992

Metabolism and in vivo transport of phosphatidylinositol in hypocotyls of dark-grown soybean
Publication: Education › Book chapter – Annual report year: 1990

Projects:

Biomarkers and their use in age-related disease prediction - exploring the relationship between obesity and type II diabetes
Project: PhD
Deciphering complex regulatory traits relating to host metabolism and immunity
Project: PhD

Revealing the pathophysiology of multiple chemical sensitivity; Immunologic response and gene expression profiling of individuals suffering from chemical sensitivity after a controlled chemical exposure
Project: PhD

Regulation of Host Metabolism by the Gut Microbiota
Project: PhD

Can the use of dairy phospholipids as emulgators protect against a pro-obesogenic intestinal microbiota?
Project

Effects of emulgating dietary fat with dairy phospholipids on establishment of the gut microbiota
Project: PhD

The role of fetal exposures to endotoxins in fetal programming of metabolic syndrome
Project: PhD

Innovative Applications of marine phospholipids for development of healthy foods
Project: PhD

Improved nutritional Properties of dairy fat from cows feed green plant material - the role of peroxime Proliferator-activator receptor agonists
Project: PhD

Omega-3 food emulsions: Control and Investigation of Molecular Structure in Relation to Lipid Oxidation
Project: PhD

Impact of Colonization on Immune System Development
Project: PhD

The Influence of the Physical Properties of Lipid-Formulations on the Developing Immune System in Early Life
Project: PhD

Nutritional Immunology
Project

Nutritional Immunology
Project

Nutrigenomic Studies of Interactions between gut Microbiota, Enterocytes and the Immune System
Project: PhD

Milk Bioactives to Prevent Gut Inflammation
Project: PhD

Nutritional Immunology
Project
Enchanging Production of Nutraceuticals in Genetically Engineered Saccharomyces Cerevisiae
Project: PhD

Isolation of human leukocytes and their chromosomes (part of the total chromosomal analysis system)
Project: PhD

Glycoglycerolipids Enzymatic Synthesis and Food Applications
Project: PhD

Improvement of Oxidative Stability of Fish Oil Enriched Foods - Ingredients Interactions and Antioxidant Effects
Project: PhD

Nutritious and Tasty n-3 PUFA rich products for a slim and healthy population: Weight reducing and Metabolic Syndrome Effects of n-3 LCPUFA and LCF
Project

Enzymatic production of ceramide from sphingomyelin
Project

Enzymatic Production of Ceramide from Sphingomyelin
Project

Production and Nutritional Aspects of Butter Enriched with Diacylglycerols
Project: PhD

Marine feed in West Greenland - Human nutrition and trophic relations
Project: PhD

Production of margarine fats by lipase-catalysed interesterification: a process, quality, and nutritional study for industrial application
Project: PhD

The importance of sphingolipid metabolism on cholesterol uptake.
Project

Nutritional importance of dietary sphingolipids
Project

Absorption and metabolism of somestrous triglycerides
Project: PhD

Nutritional status effects of milk fat compositions
Project: PhD