

**Abbreviations used in the dissertation**

AA	- amino acid
aAAD	- apparent amino acid digestibility
AG	- algal group in experiment 5
ALAT	- alanine aminotransferase
ALP	- alkaline phosphatase
ANOVA	- analysis of variation
aPD	- apparent crude protein digestibility
ASAT	- aspartate aminotransferase
cA	- crude ash
CAS	- group fed casein
cFib	- crude fiber
cP	- crude protein
BV	- biological value
BW	- body weight
BW <sup>0.75</sup>	- metabolic weight
CFU-GM	- granulocyte-macrophage colony forming units
CG	- control group in experiment 5
CSA	- colony stimulating activity
CTL	- cytolitic T lymphocytes
DC	- digestibility coefficient
dDMI	- daily dry matter intake
DHA	- docosahexaenoic acid
DM	- dry matter
DMBA	- 7,12-dimethylbenz[a]anthracene
DMI	- dry matter intake
DNA	- deoxyribonucleic acid
DRF	- dose reduction factor
DTH	- delayed type of hypersensitivity
dWG	- daily weight gain
EAAI	- essential amino acids index
E-CFU	- endogenous spleen colony forming units
EDTA	- ethylenediaminetetraacetic acid

EE	- ether extract, crude fat
ep	- experimental period
ES-D(A)	- (group fed) electroporated and spray-dried micro-algae
F	- generation of animals
FBN	- Research Institute for the Biology of Farm Animals (Forschungsinstitut fuer die Biologie landwirtschaftlicher Nutztiere)
Fem.	- females
Fig.	- figure
5-FU	- 5-fluorouracyle
GABA	- gamma amino butyric acid
Gen.	- generation
GLDH	- glutamate dehydrogenase
GM-CSF	- granulocyte-macrophage colony stimulating factor
GST	- glutathione S-transferase
GST-SH	- sulfhydryl glutathione S-transferase
HDL	- high density lipoprotein
Ht	- hematocrit
IFN	- interferon
IGV	- Institute for Cereal Processing Ltd. (Institut fuer Getreideverarbeitung, GmbH)
IL	- interleukine
i.m.	- intra muscular
IN	- intestinal nitrogen, nitrogen lost with feces
i.p.	- intra peritoneal
i.t.	- intra tumor
i.v.	- intravenously
LDL	- low density lipoprotein
LMBG	- Gesetz ueber den Verkehr mit Lebensmitteln, Tabakerzeugnissen, kosmetischen Mitteln und sonstigen Bedarfsgegenstaenden
LO	- leftover
LP-BM5	- murine leukemia virus causing MAIDS
LVL	- Office for Veterinary and Foodstuff Examination

## *Abbreviations*

	(Landesveterinaer- und Lebendsmittel-Untersuchungsamt)
Lymph.	- lymphocytes
NI	- immature neutrophiles
NM	- mature neutrophiles
MAIDS	- murine acquired immunodeficiency syndrome
MCH	- mean corpuscular hemoglobin
MCHC	- mean corpuscular hemoglobin concentration
MCMV	- murine cytomegalovirus
MCV	- mean corpuscular volume
MIP	- macrophage inflammatory protein
MNR	- maintenance nitrogen requirement
Mon.	- monocytes
NK	- natural killer cells
NPR	- net protein ratio
NPU	- net protein utilization
NU	- urine nitrogen, nitrogen excreted with urine
PBS	- phosphate-buffered-saline
PCDD	- polychlorinated dibenzo- <i>p</i> -dioxin
PCDF	- polychlorinated dibenzofuran
PCV	- packed cell volume
PD	- day of pregnancy
PER	- protein efficiency ratio
PMNs	- polymorphonuclear cells
p.o.	- per orally
ppm	- part per million, i.e. mg/kg
PPV	- productive protein value
RBC	- red blood cells
RES	- reticuloendothelial system
RNA	- ribonucleic acid
s.c.	- subcutaneously
S-D(A)	- (group fed) spray-dried micro-algae
TAK	- $\beta$ -1-3 glucan from <i>Alcaligenes faecalis</i>
T-CHO	- total serum cholesterol
TLR	- toll-like receptor

*Abbreviations*

TNF	- tumor necrosis factor
TPA	- 12-O-tetradecanoylphorbol-13-acetate
tPD	- true crude protein digestibility
TPI	- total protein intake
US-D(A)	- (group fed) ultrasonicated and spray-dried micro-algae
UV	- ultraviolet
WBC	- white blood cells
WG	- weight gain