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des Fachbereiches Veterinärmedizin
der Freien Universität Berlin**

**Untersuchungen zur Diagnostik und Bedeutung der Fettleber bei klinisch kranken
Milchkühen unter besonderer Berücksichtigung möglicher Beziehungen zur
Hypophosphatämie**

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zur Erlangung des Grades eines
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vorgelegt von

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**Clinic of Cattle
Faculty of Veterinary Medicine
Free University Berlin**

Examination of different diagnostic methods and significance of fatty liver at clinically diseased dairy cows and its relation to hypophosphatemia

**Thesis submitted
for the fulfillment of a doctor degree
in veterinary medicine (Dr. med. vet.)
at Free University, Berlin**

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Dedicated to
My parents and my family

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Abbreviations

ASAT	aspartate aminotranferase
ATL	animal tissue lysine
Ca	calcium
Cl	chloride
G.B	gall bladder
GLDH	gluatamate dehydrogenase
H&E	hematoxylin and eosin
Hb	hemoglobin
K	potassium
LDA	left displacement of abomasum
MCH	mean corpuscular hemoglobin
MCHC	mean corpuscular hemoglobin concentration
MCV	mean corpuscular volume
Mg	magnesium
Na	sodium
Na EDTA	sodium ethylene diamine tetra acetic acid
NEFA	non esterified fatty acids
NH ₄	urea
P	phosphorus
PCV	packed cell volume
P.V	portal vein
RBCs	red blood corpuscles
RDA	right displacement of abomasum
TG	triglyceride
TG/FC	total triglyceride/triglyceride content of fat
VLDL	very low density lipoprotein
WBCs	white blood corpuscles

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