Study Guide

Diet Formulation for Dairy Cattle

Center of Continuing
Education and
Lifelong Learning

➡ *INTRODUCTION*

The training program "Diet formulation for dairy cattle" was developed taking into consideration the high zootechnical level of dairy farms and the need to train nutritionists in modern, high precision mechanistic models, such as the Cornell Net Carbohydrate and Protein System (CNCPS).

It is designed for those directly involved with the nutrition of dairy cows.

➡ *OBJECTIVE*

The program aims, through an integrated approach, to provide knowledge on the use of modern ration formulation tools for dairy cattle.
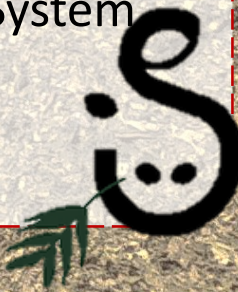
KNOWLEDGE

- Understanding feedstuffs chemical analysis

- Classification of feeds based on their nutritional impact

- Identifying animal requirements based on their production level and growth stage

- Comprehension of how mechanistic models operate to formulate diets

- Formulating and evaluating rations using mechanistic models

SKILLS

- Gain the ability to formulate dairy cattle diets

TOOLS

- The training program will be conducted using the AMTS software, that is based on the Cornel Net Carbohydrate and Protein System (CNCPS)
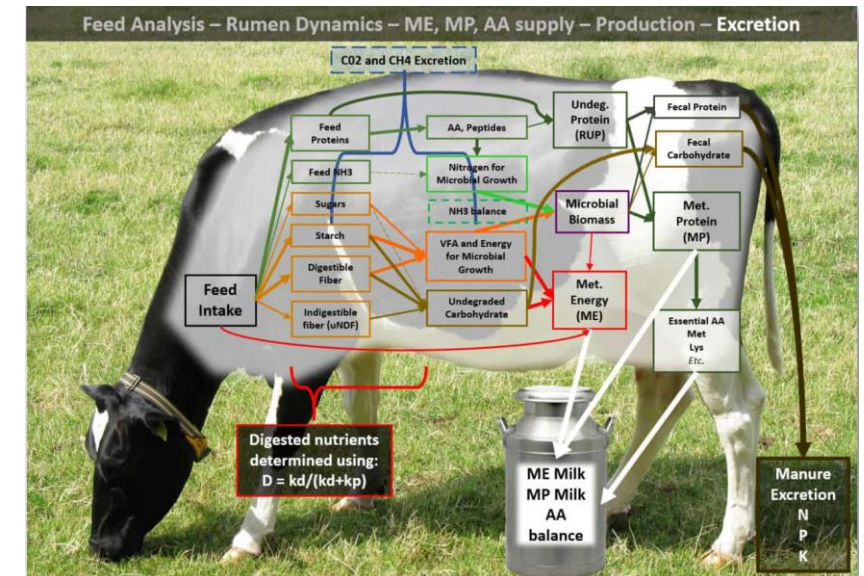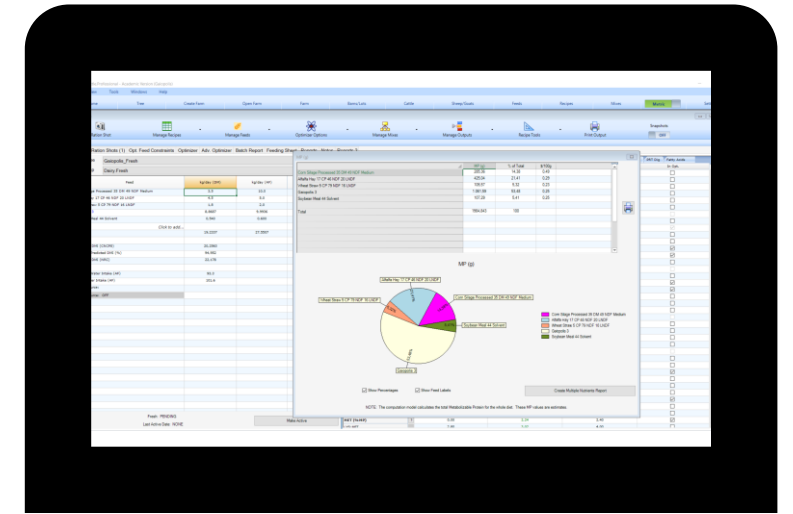
DESIGNED FOR

Professionals in the dairy cattle industry, including:

- Farmers with more than 5 years of working experience

- Animal scientists, veterinarians

- Students of animal science and veterinary medicine

6
Training Sessions

4 months
9 Lectures
7 Diet formulation sessions
2 Seminars
3-5 h /week workload

Training Sessions

Feedstuff Analysis

Nutritional Physiology of ruminants

The CNCPS

Dairy Cattle

Replacement Heifers

Supply and Control

Language

➢ English

Other possibilities depending on group formation
➢ English + Greek
➢ English + Spanish

Prerequisites

- Student or graduate of Animal or Veterinary Sciences
- Professional in Animal production with more than 5 years of experience
- Basic computer knowledge
- Internet access

Tools required

- Microsoft Teams online platform
- Any Desk remote desktop access

➡ *Tuition Fees*

- The total cost of the course is **€950**, this should be paid in following the registration

- Participants have the right to withdraw their interest from the Program with the refund of the amount paid, up to one day before the start of the program.

- No refunds are provided once the program had began

➤ Certificate of attendance

6 ECTS

Certificate of Attendance

The successful completion of the training

program will result in a

Certificate of Specialized Knowledge

from Education & Lifelong Center of University of

the University of Thessaly

The Education & Lifelong Learning Center of the University of Thessaly has ISO 9001: 2015 certification and is evaluated by the "Quality Assurance Unit" of the University of Thessaly, according to the provisions of paragraph 12 of article 48 of Law 4485/2017, as this applies. The external evaluation and certification of the quality of the educational / training programs of the Education & Lifelong Learning Center of the University of Thessaly is carried out by the "National Higher Education Authority", according to the provisions of sub-case bb, case b, case d, of paragraph 1 of article 2 of Law 4653/2020.

▶ Scientific Coordinator

▶ Instructors

Dr Andreas Foskolos

Associate Professor at the University of Thessaly teaching the modules of Ruminant Nutrition, Bovine Production and Small Ruminant Production. He was involved in the update of CNCPS during his postdoc research at Cornell University under Professor Michael Van Amburgh. In this update the protein sub-model was significantly improved and a new approach on NDF degradations kinetics in the rumen was incorporated.

Dr Mike Van Amburgh

The Ohio State University graduate with a PhD from Cornell University. Dr Van is heavily involved with the development and evolution of CNCPS. He holds a tremendous teaching and researching record while he has been involved in several educational programs around the world.

He has been awarded with the Donald C. Burgett Distinguished Advisor Award (2012, Cornell University), the Stephen H. Weiss Presidential Fellow Award (2016, Cornell University), and the Most-Cited Paper Award in the Nutrition, Feeding and Calves section of the Journal of Dairy Science (2018, ADSA).

Instructors

Dr Sam Fessenden

Sam holds three degrees in Animal Science: a PhD and a BS from Cornell University and a MS from University of Minnesota. Sam has been working with and conducting research using the CNCPS model since 2010. His PhD research focused on rumen nitrogen metabolism and prediction of amino acid supply. Sam provides global technical and nutritional support.

Dr Tom Tylutki

President and CEO of Agricultural Modelling and Training Systems (AMTS), Dr Tom Tylutki, holds a PhD from Cornell University and has been involved in the development and training of the original Cornell model since 1990. Dr Tylutki has more than 30 years experience in the field training and consulting hundred nutritionists and feeding companies around the world.

Dr Elena Bonfante

Dr. Elena Bonfante is veterinary doctor, graduated in Bologna, Italy. During her Ph.D., she spent 7 months at Cornell University in Dr. Mike Van Amburgh's Lab depend the CNCPS model.

For the last 6 years she has been working as an independent consultant in management and nutrition and she is AMTS distributor in Italy.

Contact Us

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