

Title: Carbohydrates in Animal Nutrition

Instructor: D.M. Anderson

Description: Carbohydrates form an important source of energy for both monogastric and ruminant animals. Some monogastric species, both aquatic and terrestrial, have limited ability to use carbohydrates present in their diets.

Carbohydrates from different sources have a wide range of digestibility depending on species fed and on the fibrous versus non-fibrous nature of the carbohydrate. This module will look at the carbohydrate composition and utilization in a range of feeds and relate this to different species of animal.

Method: The class will conduct carbohydrate analysis on a group of samples to be determined at the beginning of the class. There may be opportunity to work with a set of data from an existing experiment and determine the carbohydrate utilization of this study. There is also a possibility to develop an array of feedstuffs and investigate the various carbohydrates present in these. The students will evaluate their findings in relation to assigned literature readings. Depending on the nature of the analysis conducted, the students may present individual oral and written reports or decide on a group (combined) presentation and group write up.

Class meetings will be two - 1 hour sessions per week, plus independent laboratory time. There will be assigned readings.

Evaluation:	%
Initial Module Set up Discussion	5
Laboratory Component	25
Discussion of Assigned Readings	20
Oral Presentation of Findings	25
Final Written Report	<u>25</u>
	100

Date: April 16, 2010 to May 28, 2010

Note: Due to the pre-start preparation needed on this module, those interested in participating must email D.M. Anderson with their intention by April 1, 2010 - danderson@nsac.ca.