

APPENDIX 3- DRY MATTER INTAKE							
		UK	France	NL	USA	Australia	Comments
System name			UFL				
Date of current system		None	1988		NEL	None	
Primary reference			INRA (1988) Alimentation des Bovins, Ovins and Caprins		2001		
Original language			French		NRC (2001) Nutrient Requirements of Dairy Cattle, 7th edition		
Translation reference					English		
History			Dulphy et al., (1989)				
					NRC (1978)		
					NRC (1989)		
Revisions since original publication			No official revision?				
OUR REMIT							
Notes: numbers are all 'marks out of 10'							
2. Review of current systems							
2.1. To what extent are the systems used in practice?							
		Not included in UK standards, although Vadiveloo and Holmes (1979) is suggested for use					
- in teaching		MAFF (1976) used	5		8		French system has fill values for 2400 fresh forages and 1300 conserved forages, system is computerised and incorporated into PDI rationing system for dairy, beef and sheep
- in feed formulation (feed industry)					8		
- in ration formulation (on farm)		?	5		8		
2.2. Do systems cover factors that influence availability							
			includes fill values relating to bulk		8		

2.3. Is the system up-to-date with available information?		No, DEFRA funded work at SAC and FiM project have both produced revised equations					
2.4. Scientific quality of modelling approaches		Non-existent	Uses sheep to determine cattle intakes		9		
2.5. Extrapolation to UK circumstances			Has potential but need to take care how to incorporate		5		French system assumes a standard cow, poor predictor of intake in early lactation, DMI of dairy cow has been determined using sheep data for many of forages, no account of genetic merit of cow. Recent evaluations in FiM project have been poor, NRC (2001) needs to be evaluated in UK situations.
3. Areas in which information is inadequate to meet functional needs							UK has no system at all
General conclusion:							
1. Improvements to intake predictions							
Priority is to incorporate an intake prediction system into UK Nutritional Standards							Incorporate information from FiM project and evaluate intake prediction models