

ASSIGNMENT 6

Endocrinology

Refer to Data Set ENDOCRINE.DAT, on the data disk. The data set consists of split-sample plasma determinations of 4 hormones for each of 5 subjects from one laboratory. The format of the data is given in Table 9.23.

TABLE 9.23 Format of ENDOCRINE.DAT

	Column	Units
Subject number	1	
Replicate number	3	
Plasma estrone	5–8	pg/ml
Plasma estradiol	10–14	pg/ml
Plasma androstenedione	16–19	ng/dl
Plasma testosterone	21–24	ng/dl

Construct a simple random effects models to estimate within and between subjects variability in BUGS for all plasma measurements. In which plasma measurements the variation is attributable in between subjects differences?