**Saccharin fading**

This sheet contains the data produced by saccharin fading – please note that only rats 13-24 underwent saccharin fading. Column A gives the individual rat numbers, and each rat’s data is shown in one row.

Columns B-O give the individual rat weights in grams for each session.

Columns P-AC give the weights of the water bottles in grams before each session.

Columns AD-AQ give the weights of the water bottles in grams after each session.

Columns AR-BE give the amount of liquid consumed in grams, calculated as:

Liquid consumption (g) = [Weight of bottle before session] – [Weight of bottle after session]

Columns BF-BS give the alcohol consumption for each session, calculated as:

Alcohol intake (g/kg) = ([Liquid consumption] x [Specific density of alcohol] x [Percentage of alcohol in solution]) / [Weight of rat in kg]

Where the specific density of alcohol is 0.789 g/ml.

Note that the percentage of alcohol in solution changes across sessions:

 Sessions 1-4 = 0%

 Sessions 5-8 = 5%

 Sessions 9-12 = 8%

 Sessions 13-14 = 10%

**SA training**

This sheet contains data produced by training the animals to respond instrumentally for alcohol. Columns A and B give the rat numbers and prospective group assignments.

Columns C-O give the active lever presses made in each session.

Columns P-AB give the inactive lever presses made in each session.

Columns AC-AO give the numbers of reinforcers earned in each session.

Columns AP-BB give the amount of fluid (ml) remaining in the well at the end of each session.

Columns BC-BO give the individual rat weights in grams for each session.

Columns BP-CB give the alcohol intake in g/kg for each session, calculated as:

Ethanol intake (g/kg) = ((([Reinforcers earned] x [0.1 ml/reinforcer]) – [Amount of fluid remaining in well]) x [Specific density of alcohol] x [Percentage of alcohol in solution]) / [Weight of rat in kg]

Where the specific density of alcohol is 0.789 g/ml and the percentage of alcohol in solution is 10%.

**Reactivation**

This sheet contains the data produced in the reactivation session. Columns A and B give the rat numbers and group assignments. Column C gives the number of active lever presses, and Column D gives the number of inactive lever presses. (Note that this session was not reinforced.)

**Relapse test**

This sheet contains the data produced in the first ‘relapse’ test session. Columns A and B give the rat numbers and group assignments. Column C gives the number of active lever presses, and Column D gives the number of inactive lever presses. (Note that this session was not reinforced.)

**Rebaselining**

This sheet contains the data produced by the three ‘rebaselining’ sessions in which animals instrumentally self-administered alcohol. Columns A and B give the rat numbers and the previous treatment groups respectively (note that ‘No CS’ refers only to the first ‘Relapse’ test session – all animals were presented with the CS during rebaselining).

Columns C-E give the active lever presses made in each session.

Columns F-H give the inactive lever presses made in each session.

Columns I-K give the numbers of reinforcers earned in each session.

Columns L-N give the amount of fluid (ml) remaining in the well at the end of each session.

Columns O-Q give the individual rat weights in grams for each session.

Columns R-T give the alcohol intake in g/kg for each session, calculated as:

Ethanol intake (g/kg) = ((([Reinforcers earned] x [0.1 ml/reinforcer]) – [Amount of fluid remaining in well]) x [Specific density of alcohol] x [Percentage of alcohol in solution]) / [Weight of rat in kg]

Where the specific density of alcohol is 0.789 g/ml and the percentage of alcohol in solution is 10%.

**Extinction training**

This sheet contains the data produced in the single 3-hour extinction session, in which responding was not reinforced. Columns A and B give the rat numbers and previous treatment groups.

Columns C and D give the total numbers of active and inactive lever presses made during the 3-hour session.

Columns E-AN give the numbers of active lever presses made for each 5-minute time bin within the 3-hour session.

Columns AO-BX give the numbers of inactive lever presses made for each 5-minute time bin within the 3-hour session.

**CS reinstatement**

This sheet contains the data produced in the CS-induced reinstatement test session. This session was divided into a 15-minute phase where no CSs were presented, followed by a further 45 minutes of testing where the CS was presented contingent on responding. The data are presented in 15-minute time bins.

Columns A and B give the individual rat numbers and the previous treatment conditions respectively (note that ‘No CS’ refers only to the first ‘Relapse’ test session – all rats experienced the same contingency of CS presentation in this test session).

Columns C-F give the numbers of active lever presses made in each 15-minute time bin of the 60-minute session.

Columns G-J give the numbers of inactive lever presses made in each 15-minute time bin of the 60-minute session.

**Two bottle choice**

This sheet contains the data produced by the two-bottle choice procedure. The rats were run in two squads (1-12 and 13-24). Columns A and B give the individual rat numbers and the previous treatment conditions respectively (note that ‘No CS’ refers only to the first test session). Each rat’s data is shown in one row. Additionally, in rows 28 and 29, the weights of additional bottles placed in an empty cage are recorded, to indicate loss of fluid through leakage, evaporation, etc.

Columns C-N give the individual rat weights in grams for each session.

Columns O-Z give the weights of the water bottles in grams before each session.

Columns AA-AL give the weights of the water bottles in grams after each session.

Columns AM-AX give the water consumption for each session, calculated as:

Water consumption (g) = [Weight of water bottle after session] – [Weight of water bottle before session] – [Weight of water lost in empty cage]

Columns AY-BJ give the water intake in g/kg, calculated as:

 Water intake (g/kg) = [Water consumption] / [Weight of rat in kg]

Columns BK-BV give the weights of the alcohol bottles in grams before each session.

Columns BW-CH give the weights of the alcohol bottles in grams after each session.

Columns CI-CT give the alcohol consumption for each session. This is calculated for individual animals in rows 30-53, as:

Alcohol consumption (g) = [Weight of alcohol bottle after session] – [Weight of alcohol bottle before session] – [Weight of alcohol lost in empty cage]

For columns CI-CT, rows 2-25, the alcohol consumption is listed as that calculated in rows 30-53 unless that value is negative, in which case it is given as 0g.

Columns CU-DF give the alcohol intake in g/kg, calculated as:

Alcohol intake (g/kg) = ([Alcohol consumption] x [Specific density of alcohol] x [Percentage of alcohol in solution]) / [Weight of rat in kg]

Where the specific density of alcohol = 0.789 g/ml and the percentage of alcohol in solution is 10%.

Columns DG-DR give the alcohol preference in each session, calculated as:

Alcohol preference (%) = ([Alcohol consumption] / ([Alcohol consumption] + [Water consumption])) x 100