1. OPEN *FICS.xls* & ENABLE MACROS

If a dialog box (Figure 1) opens automatically with a message about macros, choose to "Enable Macros." In cases when this box does not show up or a warning message (Figure 2) shows up, you should lower the macro security level to "Medium" as shown in Figure 3. Close the Excel program and reopen it in order to enable macros capabilities (Figure 1).
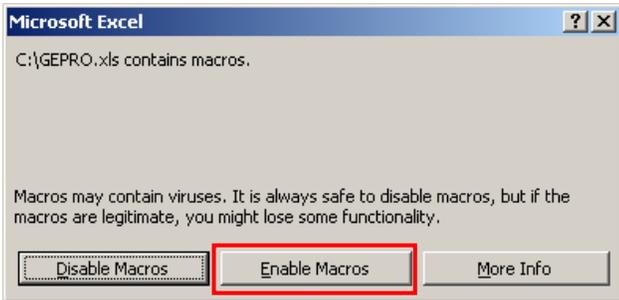
Figure 1. A dialog box asking whether to disable or enable macros. When you open the file FICS.xls, a dialog box will appear asking if you want to enable macros or not. Choose to *Enable Macros*.

Figure 2. A warning message about macro security.
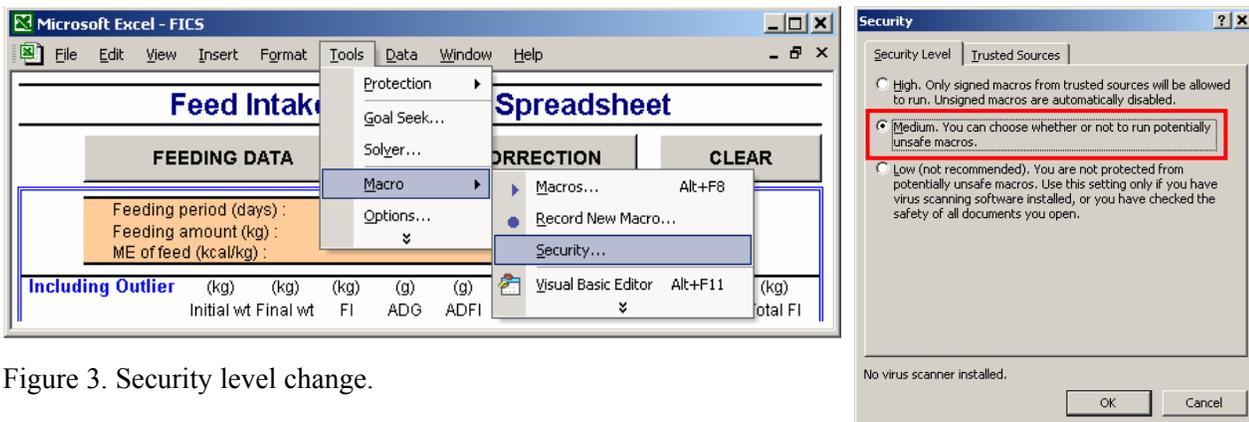
Figure 3. Security level change.

2. INPUT FEEDING DATA

Clicking "Feeding Data" activates a window where feeding information is input including feeding period, consumed feed amount per pen, ME (kcal/kg) of feed, the number of pigs in the pen, and a pig identified as a potential outlier (Figure 4). After clicking the "OK" button, users can input the initial and final weight of the pigs for the period in the bordered blank cells (Figure 5).
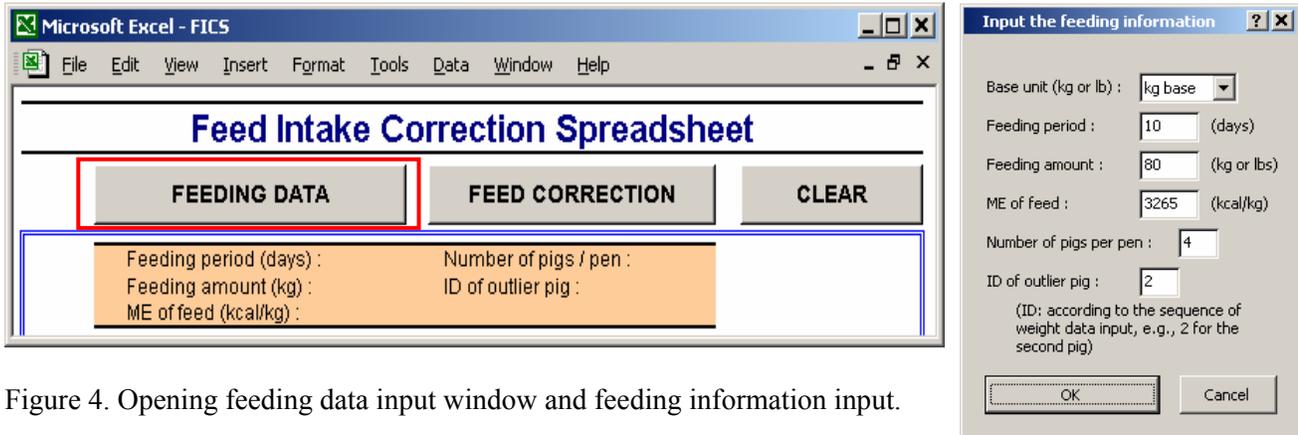
Figure 4. Opening feeding data input window and feeding information input.
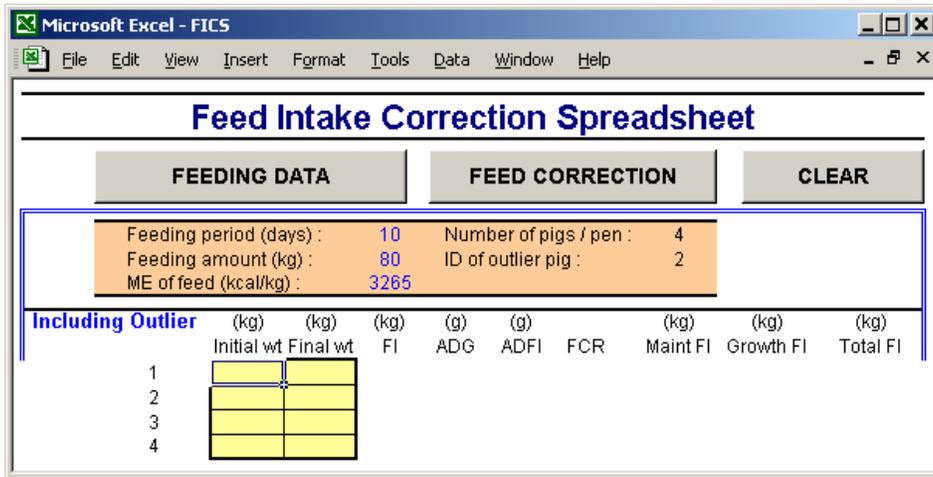
Figure 5. Initial and final body weight input.

3. INDIVIDUAL FEED INTAKE ESTIMATION

Clicking "Feed Correction" shown in Figure 6 will calculate individual feed intake of all pigs, corrected pen feed intake, and the feed:gain ratio (Figure 7).
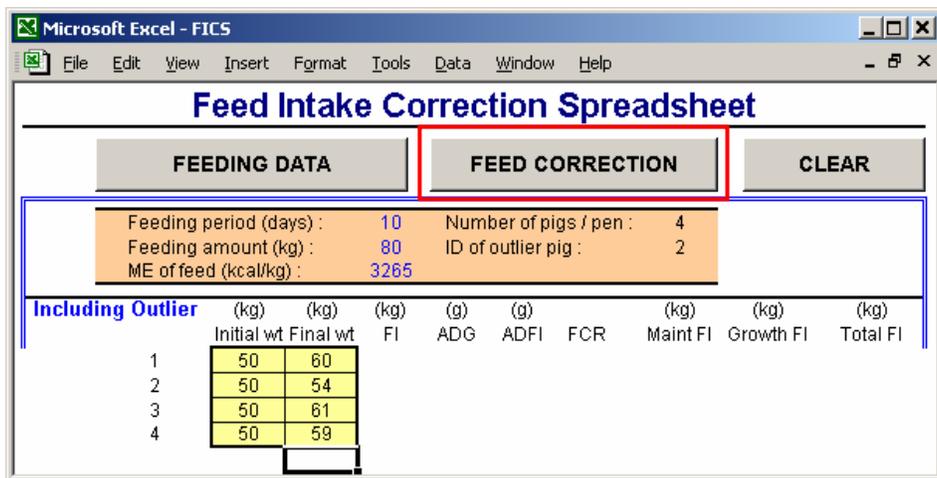
Figure 6. Feed intake correction.

Individual feed intake of all the pigs is calculated (Figure 7-ⓔ), the corrected pen feed intake and feed:gain ratio are shown in Figure 7-ⓕ. An outlier confirmation procedure, which shows the difference of the outlier's growth from its pen mates, is also included in the macro (Figure 7-ⓖ).
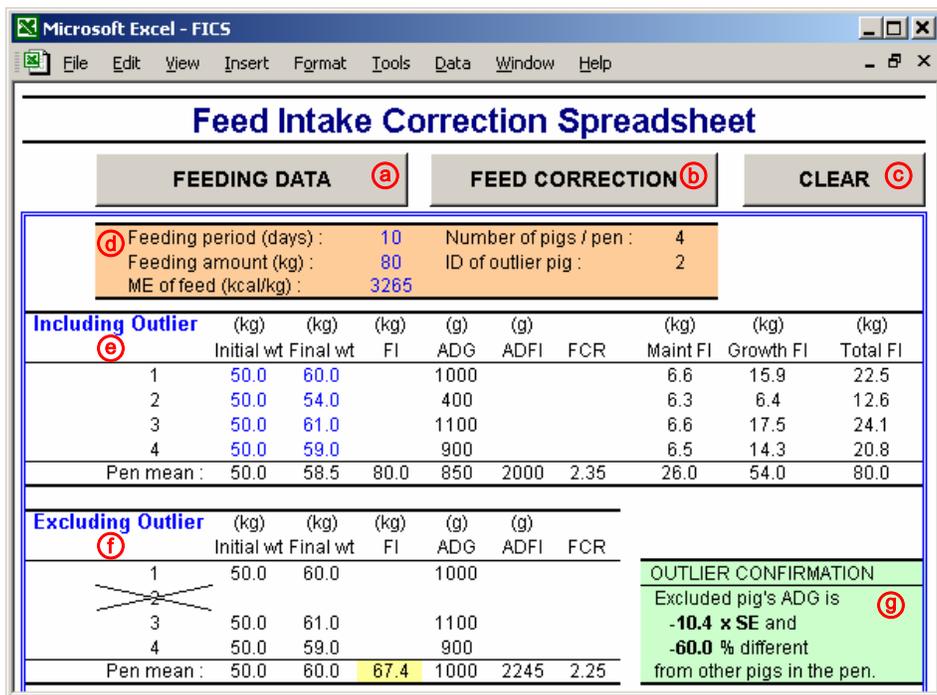
Figure 7. Feed intake correction result.

Potential error warnings are included in the macro to avoid accidental wrong selection of the pig for exclusion (Figure 8). This message will show up when the selected outlier pig's weight gain is not the largest or smallest in the pen.

Figure 8. Outlier error warning.

Users can calculate individual feed intake of the other pens using the buttons on the top (Figure 7-ⓐ~ⓒ). If the number of pigs in the pen and a potential outlier pig's ID (assigned in Figure 4) is the same, users may simply change blue-color numbers in Figure 7-ⓓ,ⓔ.