


6. Operating basics

Operation of the *OptiFeed* program is analogous to operation of other programs running under MS Windows operating system, that is why operating it should not cause any difficulties.

Operating the program will be presented in detail on the example of a window used to create nutritional recommendations (in order to call this dialog window, select position << Nutritional recommendations >> from << EDIT >> menu, then click the button with green plus). This recommendation should be linked with a concrete production phase of concrete production group of concrete animals group. A list of several nutrients including their recommended ranges of contents shall constitute its content.

 Recommendation

Creation date: 07.11.2016 19:36:37

Animals group:

Code:

Name:

Available nutrients:


- ▷ Composition
- ▷ Energy Poultry
- ▷ Energy Swine
- ▷ Energy Fur
- ▷ Macro minerals
- ▷ Amino acids
- ▷ Digestible amino acids Poultry
- ▷ Digestible amino acids Swine
- ▷ Vitamins
- ▷ Micro minerals
- ▷ Fatty acids
- ▷ Enzymes
- ▷ Colorants
- ▷ Coccidiostats
- ▷ Feed additives
- ▷ Coefficients/factors

Chosen nutrients **Nutrients ratios**

Code	Nutrient
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 OK

 Cancel

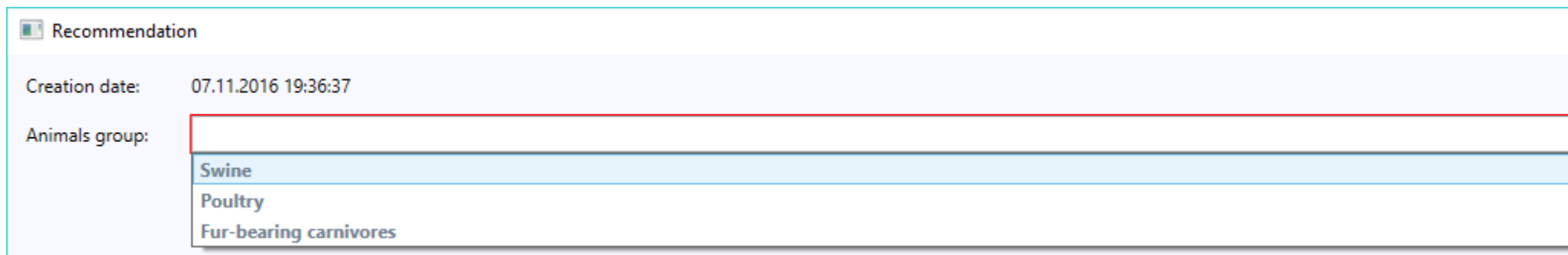
animals group: select from the list or enter

Data are entered using keyboard and mouse.

TAB key is used to move to the next field or button, while Shift + TAB combination is used to move to the previous.

The program constantly checks completeness and accuracy of entered data. A toolbar with error message content is found at the bottom of each window. In our case, it informs us when that we have not entered animals group and that it should be selected from the list or a new one should be entered. This message comes directly from the selection list labeled animals Group. Expand this selection list using a small downward arrow located to the right of the error message. Note that animals groups listed in both gray and black font are found in it (if you have just started working with the program, then they be will be exclusively in gray). Elements from the sample database attached to the program by its authors are marked with gray. While elements that you would have created are marked in black.

Note: The nutrients, ingredients and nutritional recommendations database contained in the program has a purely illustrative function. While the authors have used their best endeavors to see to it that they are accurate, however, they do not take any responsibility for the consequences of its use.



The screenshot shows a window titled "Recommendation". It contains a "Creation date" field with the value "07.11.2016 19:36:37". Below this is an "Animals group" field with a dropdown menu. The dropdown menu is open, showing three options: "Swine", "Poultry", and "Fur-bearing carnivores". The text "Swine" and "Poultry" are in bold, while "Fur-bearing carnivores" is in a lighter font.

Note also that animals groups are listed in bold. This is how precisely groups are highlighted in the program, whether they be animals, ingredients, or nutrients. The thing here is to clearly distinguish grouping elements (for example ingredients groups) from elements grouped together (for example ingredients).

Let's go back to our example. Select the first animals group, and confirm the choice by going to a newly opened field, Production group, using the mouse or TAB key. Note that error message has disappeared from the Animals group field. While at the bottom of the screen its content has changed to "production group: select from the list or enter".

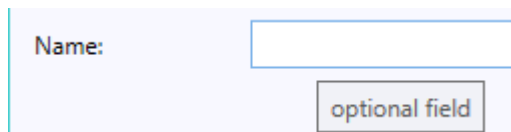
Select first group production in line and move to Production phase field. Instead of choosing the production phase from the list, enter it manually (you can not do this in DEMO mode), for example Prestarter, then press TAB to confirm. Now pull down for a moment the production phases list and observe two things - first, the phase that you have just entered has been saved in the list. Once you complete entering this nutritional recommendation and confirm it by pressing << OK >> button, this phase will be permanently stored in the program database. Secondly - the new phase is printed in black, which is characteristic for the elements created by you.

The screenshot shows a web form titled "Recommendation". It contains several input fields and a dropdown menu. The "Creation date" field is filled with "07.11.2016 19:36:37". The "Animals group" field contains "Swine". The "Production group" field contains "Piglets and weaners". The "Production phase" field is currently empty, but a dropdown menu is open below it, showing three options: "Prestarter 1", "Prestarter 2", and "Starter". The "Code" and "Name" fields are currently empty. A red box highlights the "Production phase" field and its dropdown menu.

Creation date:	07.11.2016 19:36:37
Animals group:	Swine
Production group:	Piglets and weaners
Production phase:	<input type="text"/>
Code:	<input type="text"/>
Name:	<input type="text"/>

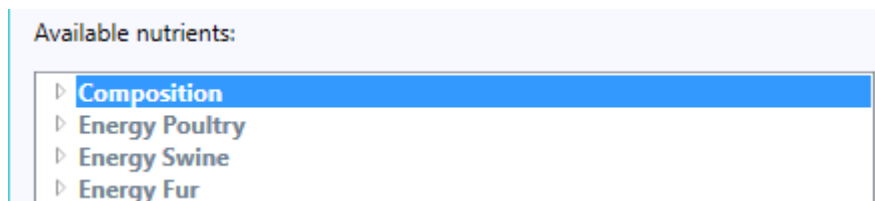
Let us now turn to the next field, named Code. It is a mandatory, unique element identifier modeled after a name, only that it is usually more concise. You can enter manually or - if the codes do not matter to you - generate using button with key. Manually entered code may be in any form with one exception - it can not start with # character, which is reserved for items supplied by program authors .

The next field - Name - is an optional field, as indicated by a hint being displayed when you move the mouse cursor over it. You can leave it blank (then the code itself written, inside square brackets, will serve as the name of the recommendation) or type any text:



A screenshot of a form element. On the left, the text "Name:" is displayed. To its right is an empty rectangular text input field. Below the input field, a small rectangular tooltip box contains the text "optional field".

Let us now turn to the second part of the window titled Available nutrients. Here we will find all the nutrients grouped together - both those provided by program authors (in gray) and created by you (in black):



A screenshot of a window titled "Available nutrients:". Below the title is a list of four expandable categories, each preceded by a right-pointing triangle icon. The first category, "Composition", is highlighted with a blue background. The other categories are "Energy Poultry", "Energy Swine", and "Energy Fur".

The nutrients contained in a given group will be published after unfolding it. This can be done in two ways: by double-clicking a given group or by clicking once on the arrow on the left of its name:

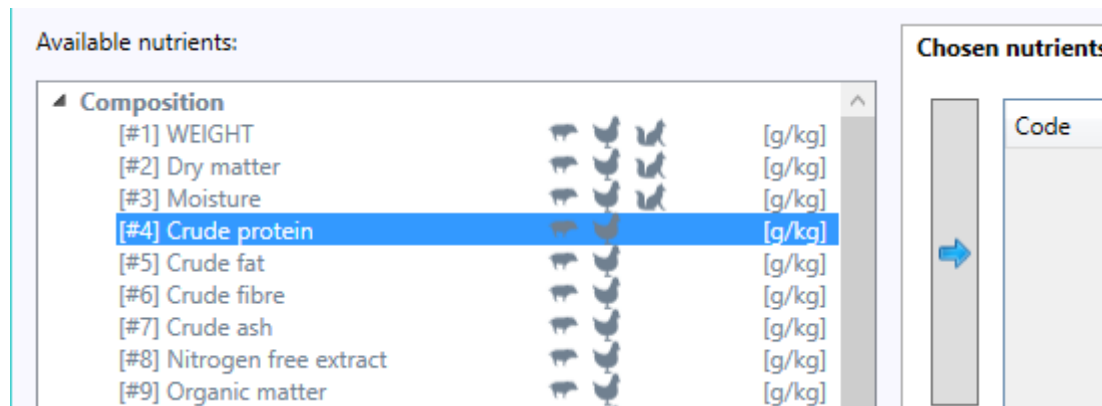
Available nutrients:

Composition			
[#1] WEIGHT	↑	↓	[g/kg]
[#2] Dry matter	↑	↓	[g/kg]
[#3] Moisture	↑	↓	[g/kg]
[#4] Crude protein	↑	↓	[g/kg]
[#5] Crude fat	↑	↓	[g/kg]
[#6] Crude fibre	↑	↓	[g/kg]
[#7] Crude ash	↑	↓	[g/kg]
[#8] Nitrogen free extract	↑	↓	[g/kg]
[#9] Organic matter	↑	↓	[g/kg]
[#10] Fermentable organic matter	↑	↓	[g/kg]
[#12] Sugars total	↑	↓	[g/kg]
[#13] Lactose	↑	↓	[g/kg]
[#14] Starch	↑	↓	[g/kg]
[#20] Protein dig. Fur		↓	[g/kg]
[#21] Fat dig. Fur		↓	[g/kg]
[#22] Carbohydrates dig. Fur		↓	[g/kg]

Note that unlike the group specifics, nutrients are written using font of standard thickness (not bold).

Double-clicking on a particular nutrient would cause a transition to editing mode. However, this will not work here, editing is allowed only in the trees located in program main window.

With a single click, we can highlight any nutrient. Note that this would unblock the arrow button located on the right:

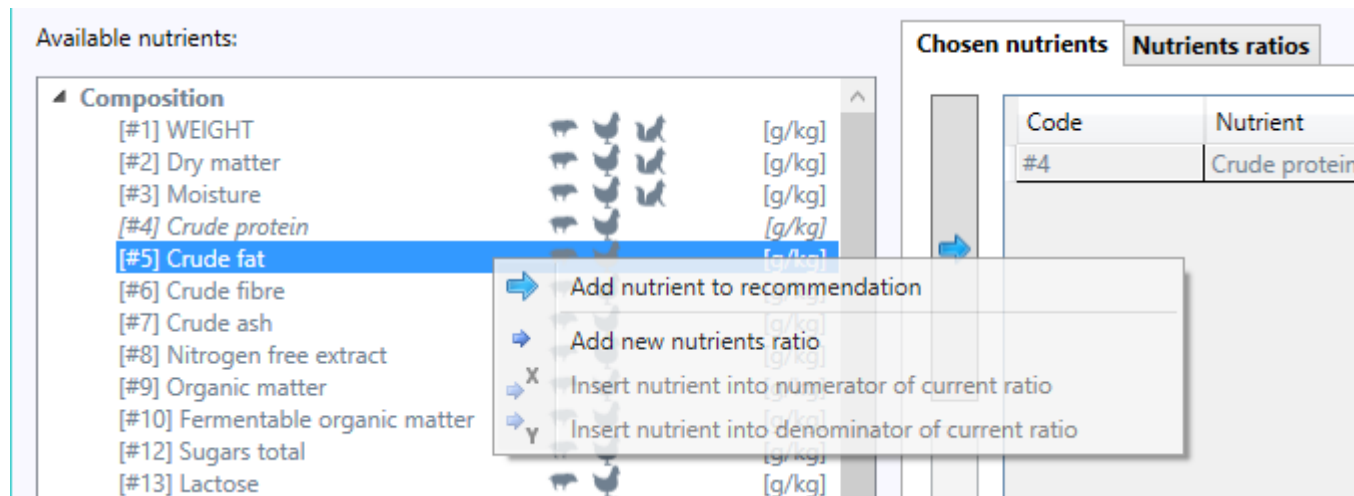


Clicking of this button causes adding of highlighted nutrient to the list of nutrients contained in our nutritional recommendation:



Note that the nutrient highlighted in the tree now appears in italics. In this way, the program marks the nutrients already used in the recommendation.

Now click in the tree a second nutrient, but this time using right mouse button. In effect, a context menu with a complete list of commands that can be performed on a selected nutrient opens. Some of these commands may be inactive (grayed out):

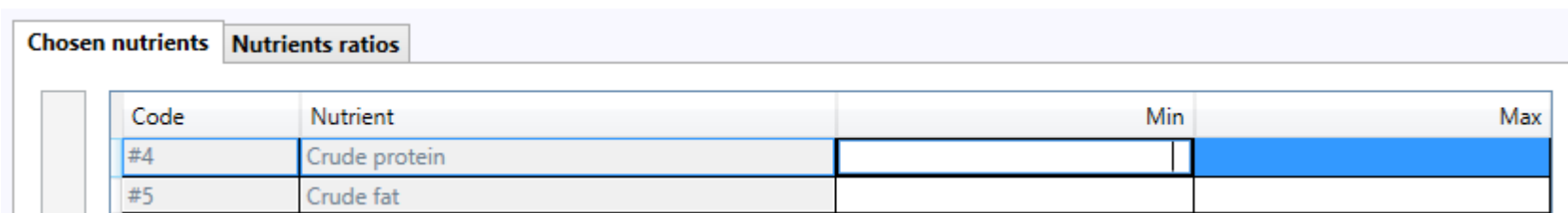


In some trees (however, not with this) it is possible to additionally open context menu on grouping elements and on empty areas of the trees, each time giving a different list of commands.

Let us now move to the table entitled Chosen nutrients located to the right. Each row of this table represents one nutrient which has just been selected to our recommendation. Some of the nutrients may be displayed in gray font, some black. We already know what the reason behind this is. Gray nutrients (codes starting with #) are derived from the sample database, included with the program, while the black were created by you. Once again, note the background color of individual table cells - some are light gray, others white. The light gray (here: code and nutrient) are non-editable. This means that you can not change their content here. However, the white fields (here: Min and Max) may be edited directly in the table.

Chosen nutrients		Nutrients ratios	
Code	Nutrient	Min	Max
#4	Crude protein		
#5	Crude fat		

To move into cell edit mode, highlight it with the mouse, then: Press the F2 button on the keyboard, double-click the left mouse button, or simply start typing the target value:



Code	Nutrient	Min	Max
#4	Crude protein		
#5	Crude fat		

Now enter any number (e.g. 10). You have several options for the confirming this value - using the mouse or keyboard. Using the mouse, just click any other editable window field - it could open another cell in the table in which you want to enter a value (for that case double click) or a field outside the table (e.g. Name - for this case a single click is enough). Using the keyboard, you have several options:

- if you do not want to edit another table input box, press Esc
- if you want to go to an input box located below the one currently being edited - press Enter
- if you want to go to an input box located above the one currently being edited - press Shift + Enter
- if you want to edit an input box located to the right of the one currently being edited - press Tab
- if you want to edit input box located to the left of the one currently being edited - press Shift + Tab.

If there is already a number in a given cell and you want to overwrite it, simply start typing the new value. However, if you want to just change, and not overwrite, go into edit mode by pressing F2 on the keyboard or by double-clicking left mouse button. Now you can freely change it, with this that double-clicking the mouse selects it decimal or fractional part. The mouse and arrow keys to the right and left as well as HOME / PGUP (to jump to beginning of a number) and END / PGDN (to jump to the end of a number) keys are used to move the cursor within the edited number. If while editing a number you decide after all to delete it, press any letter (e.g. "d" as delete; we use "q" because it is conveniently just below the numeral 1), then type new value. This is especially useful when you want to overwrite a few numbers on a single line. In this case, we override the first number by entering a new value, then press Tab key, which takes us in edit mode into the cell located to the right, now press any letter to clear the old content of this cell, and finally enter the new number. DEL key is used to delete / reset values without going into edit mode.

Once again, note that the program constantly monitors data entered by you in order to protect you from making a mistake. In the case below, maximum protein content typed is (5%), which is less than the minimum content (10%). The program immediately notifies of this by surrounded both values with red box, on hovering over it, a message "minimum content can't be greater than maximum one" is displayed. This message is also repeated in the bar at the bottom of the screen:

The screenshot shows a software interface with two main panels. On the left, under "Available nutrients:", there is a list of nutrients under the heading "Composition":

- [#1] WEIGHT [g/kg]
- [#2] Dry matter [g/kg]
- [#3] Moisture [g/kg]
- [#4] Crude protein [g/kg]
- [#5] Crude fat [g/kg]

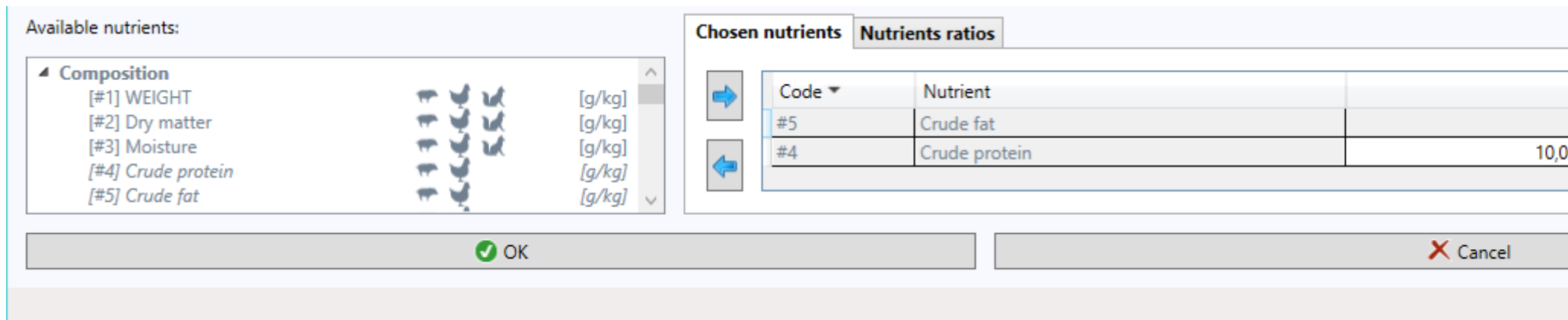
On the right, under "Chosen nutrients", there is a table with two tabs: "Chosen nutrients" and "Nutrients ratios". The "Chosen nutrients" tab is active, showing a table with the following data:

Code	Nutrient	
#4	Crude protein	10,0
#5	Crude fat	

The cell containing "10,0" is highlighted with a red border. A tooltip message "minimum content" is visible over the cell. Below the table, there are "OK" and "Cancel" buttons. At the bottom of the window, a red error message reads: "nutrient [#4] Crude protein: minimum content can't be greater than maximum one".

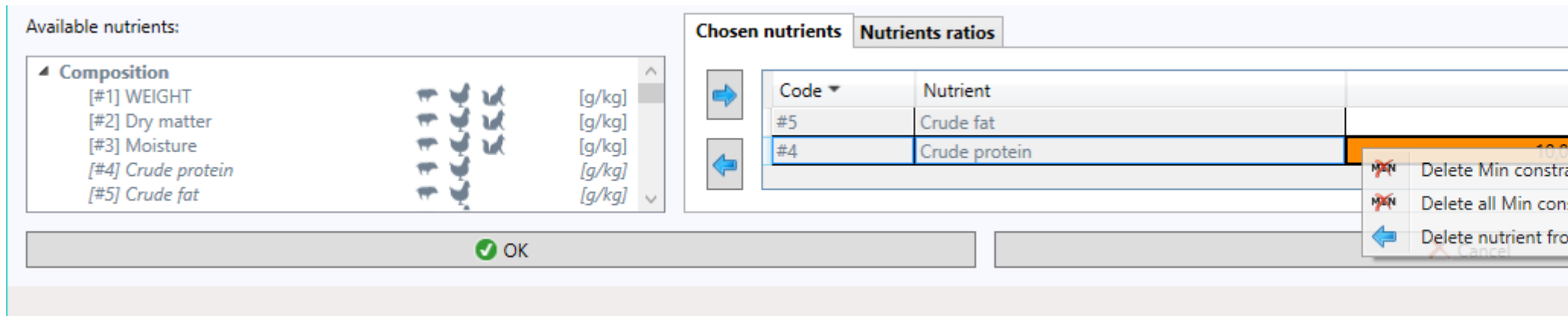
As also shown in the screenshot above, you can always customize the width of each column in the table at any moment. Likewise, you can change the size and position of the whole window, which will be stored for the future in the program settings.

Data presented in tables can be sorted – to this end, it is enough to click the header of the column on which you want to sort the rows:



In the above example Code column header was clicked - twice, which caused sorting of components by their codes in descending order (single click causing sorting in ascending order), which is indicated by a small black arrow with arrowhead pointing down.

Just like the trees, the tables have their own context menu that can be opened using the right mouse button:



Individual table cells may mask various commands.

Thus we reached the end – nutritional recommendation is complete, as evidenced by unlocking of the button with the words << OK >>.

Other program windows - including the main – are operated in the same way.