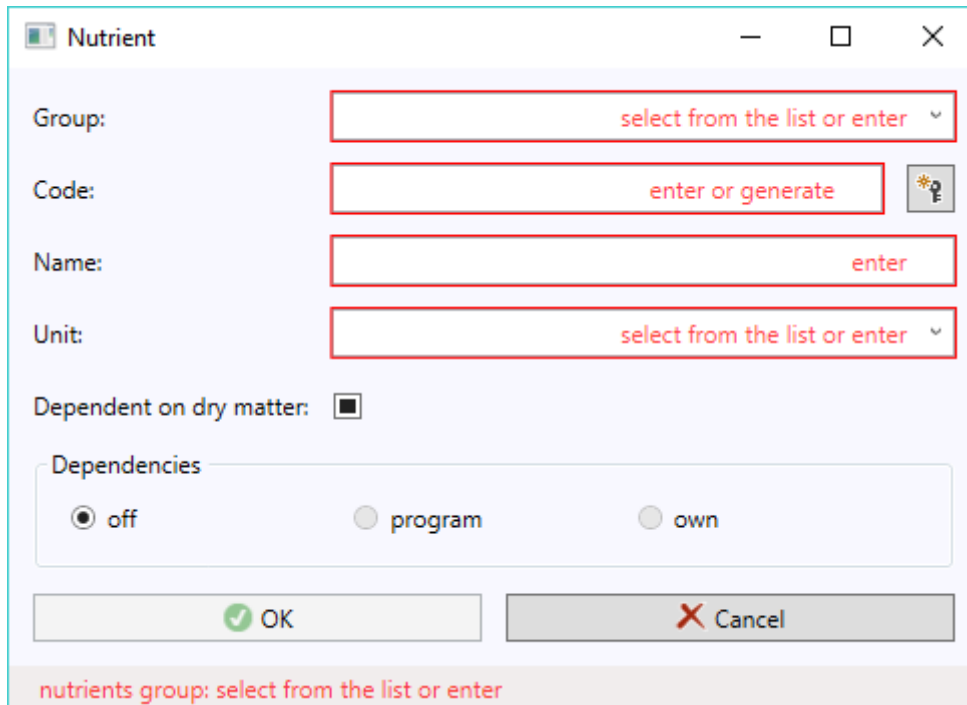## 10. Nutrient

Nutrient window is used to create new and edit existing nutrients. These nutrients may then be later used in feed recipes and nutritional recommendations.


Below listed data are found in the Nutrient window:

- (Nutrients) group - select existing value from the drop-down list or enter a new one and move to the next input box
- Code - enter unique value within all the ingredients or generate it using button with key
- Name - enter any value
- (Content) unit - select existing value from the drop-down list or enter a new one and move to the next input box
- Dependent on dry matter - this input box should be checked or unchecked, or left in a unspecified state (as above)

Nutrient with a code # 2 and name Dry matter warrants particular attention. If while editing nutrients (in the Ingredient or Nutrient content window) we change its contents, then upon clicking << OK >> button, the program will asks whether to automatically recalculate own contents of remaining nutrients dependent on dry matter:
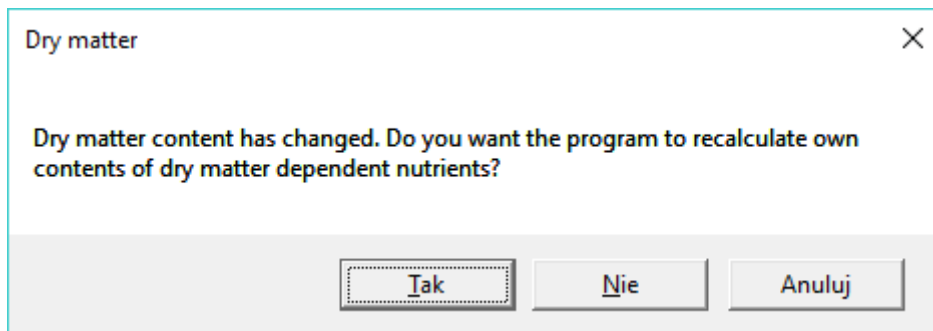
It should be noted that here it is about own contents, and not those calculated from dependencies, which are calculated in the Ingredient window on an ongoing basis. Furthermore, if the answer to raised question is in affirmative, then only those nutrients that have marked in the Nutrient window as "dependent on dry matter" will be calculated:
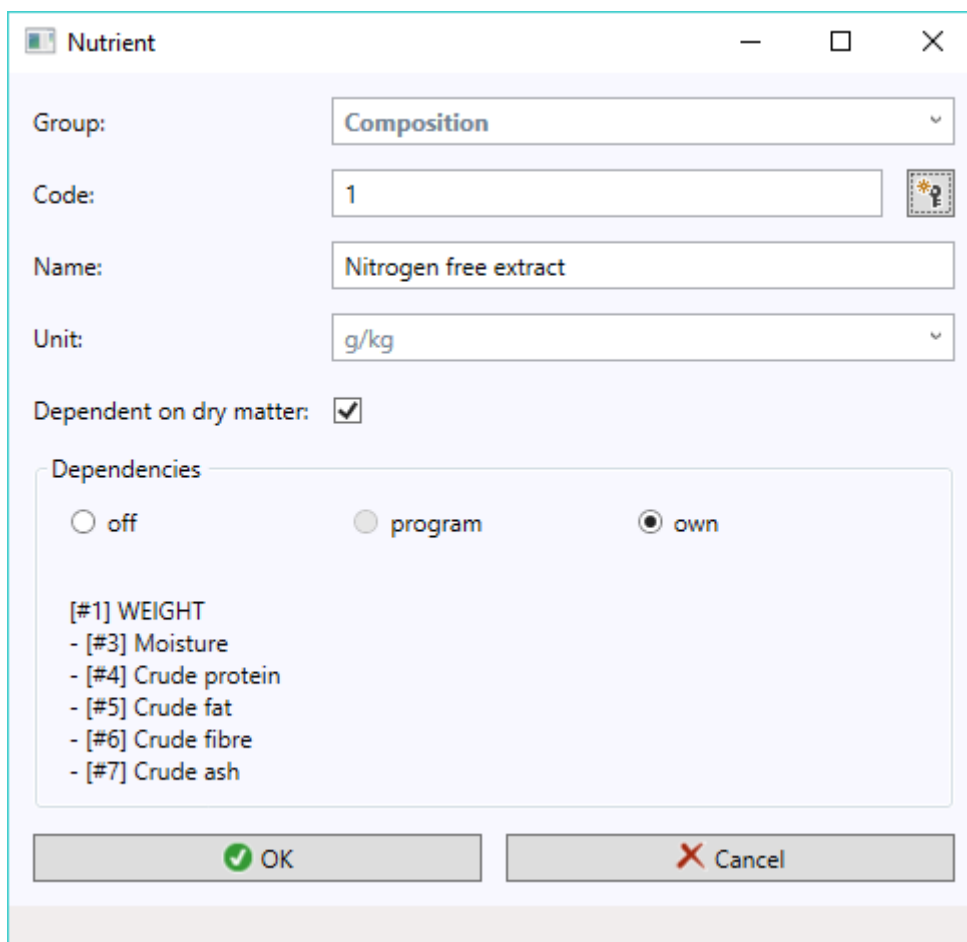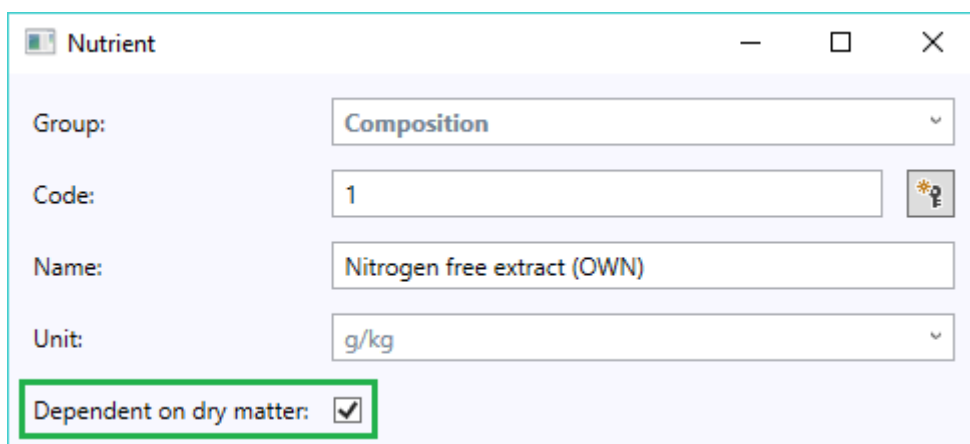

In order for a nutrient to be considered dependent on dry matter, it has to have this box checked (as above). Alternatively, this box could be left in an unspecified state:
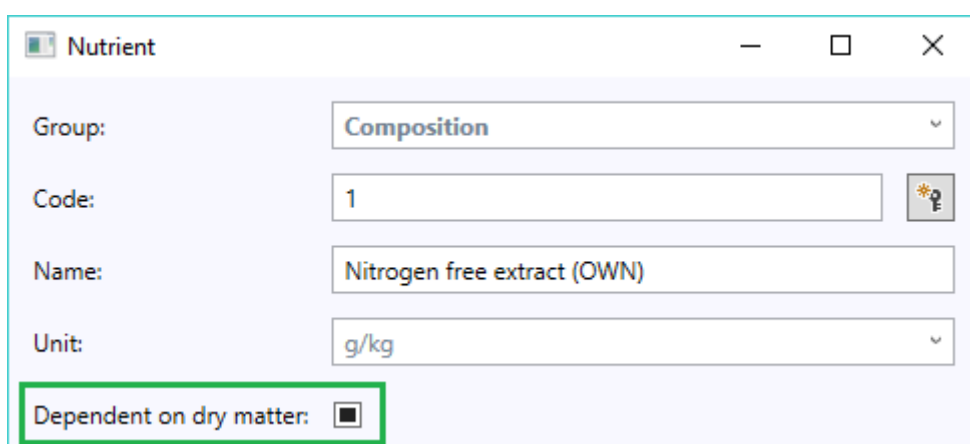
Then a nutrient's unit shall determine whether or not the program take it as dependent on dry matter. The program consider nutrients of any unit other than "%" and "no unit" as dependent on dry matter.

Whether contents of specific nutrient in ingredients may be calculated from the dependencies should be specified in the Dependencies Box. These dependencies are defined in form of regression equations. They make it possible to link the contents of one nutrient to others and to automatically calculate its new value in the event of their changes. Nutrients contained in the sample database included with the program can use non-editable dependencies defined in that base (so-called program dependencies) or from user-defined dependencies (i.e. own dependencies), editable only in the PRO version of the program. However, own nutrients may only use own dependencies (applys only to PRO version).

Preview of dependencies is located just below mode switches:

In the above example we see that Nitrogen free extract nutrient content is defined using own dependencies. In order to quantify the content of this nutrient in the ingredient, the program subtracts own moisture, crude protein, crude fat, crude fiber, and crude ash content from the WEIGHT of this ingredient.

At any moment we can turn off dependencies and thereby force the program to use own contents (not to be confused with its own dependencies):

It should also be noted that upon adding a copy of program nutrient (e.g. # 8 Nitrogen free extract), the program automatically switches the dependency mode from program dependencies to own dependencies. As a result, any changes on the dependencies of this nutrient # 8 Nitrogen free extract, published as part of program update, will not be transferred to our copy of this nutrient and therefore does not override dependencies that we could use for our own needs.

Any redundant groups of nutrients can be deleted from the Nutrients groups window, operated from the << EDIT >> menu in the main program window. It is also possible to change groups codes and names.

Any redundant nutrients units can be deleted from the Nutrients units window, operated from the << EDIT >> menu in the main program window. It is also possible to change units codes and names and their scale (number of decimal places).

Attention: Care should be taken while editing nutrients used in recipes, because any changes confirmed in the Nutrient window will automatically be propagated to all these recipes.