Fish Feed Technology

PhD. student Dr.A.Y.Al-Dubakel **Diet formulation 4**

Feed Formulation Calculations

4- Excel diet formulation

- Open up the worksheet called "Database"
- Select the ingredients that you want to include in the formulation by typing its number in Column "B" alongside its name (the maximum number of ingredients that can be selected at any one time is 33). You can also enter the cost of each ingredient in Column "AK" if you want diet cost information (see Point 9). After you have typed in the number of each of the required ingredients, hold down the 'shift key' and select all cells in the white area of Column "B" and "Copy".
- Move to the worksheet called "Blank" and paste this column of numbers for the selected ingredients. This will list the typed numbers but with blanks for those rows which were not selected.
- To get rid of these blank rows, immediately after pasting the column to the "Blank" worksheet" (and with the data still 'highlighted'), go to "Data" and select "sort". Make sure that you select "no header row". Then click "OK" and all empty rows in the column will be removed.

Feed Formulation Calculations

Select only the sorted numbers and copy this to Column "A" in the worksheet called "Diet Calc". This will then list the correct name of the selected ingredient and its nutrient composition.

Enter the inclusion level for each, or some, of the ingredients and this will automatically sum the total amount included and calculate the nutritional composition of the formulation on a percent basis. (NB if the total amount in the formulation is LESS THAN, or MORE THAN, 100, the calculation will ADJUST the amounts in proportion so that the calculation is based on 100 units. The output is as a percent (other than for energy and astaxanthin) of the diet as formulated and for the derived DM content of the formulation. An exact copy of the ingredient list, amount included and the nutrient composition of the formulation appears alongside the nutrient specification output table. This output can then be copied and moved to another worksheet (eg the "Blank" sheet) and stored there if you are doing a series of formulations that you want to save/compare when all formulations have been done.

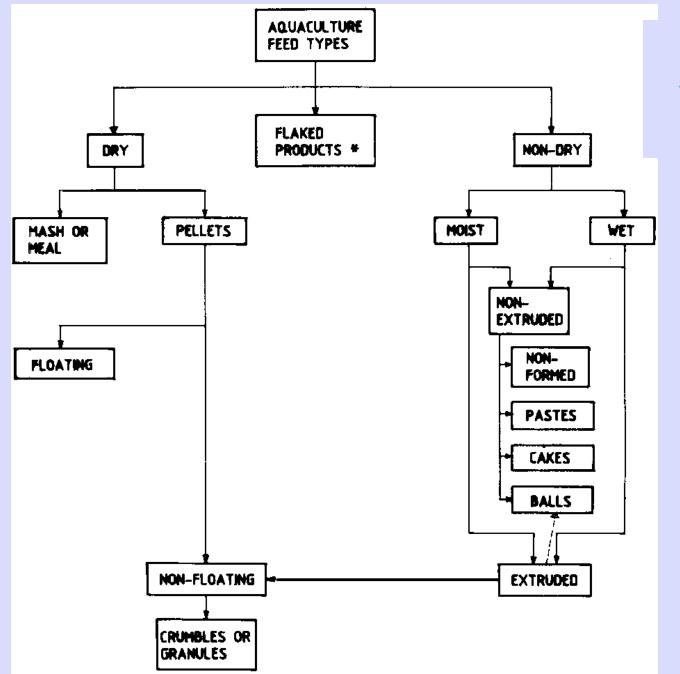
The program is NOT a least-cost diet calculation program. However, you can add the cost of the ingredient into the "Database" sheet (Column "AK") and the program will calculate the cost of the formulated diet.

There is room at the bottom of the data in "Database" for you to add your own ingredients and their nutrient composition. There is space for about 17 ingredients to be listed and these ingredients will then be picked up in the diet calculation once you enter the corresponding ingredient number.

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nimal meals		1	Casein	91.5	3.7	21.7	20.5	86.5	81.7	0.2		0	/0	0	/0
	<u> </u>		Blood meal (batch)	89.0		22.0	14.2		57.5						
			Blood meal (ring/spray)	87.8	3.2	22.0	14.5			1.0					
			Crustacean meal (lango)	95.0	32.0	14.0	11.1	40.9		7.4			0		0.5
			Fish meal (50% Tuna)	93.2	25.2	18.6	14.9			7.6					
			Fish meal (65% - anchovy)		15.7	21.2	18.7								0.4
			Fish meal (70% - Danish)	90.3	12.4	20.2	14.5			13.3					0.5
			Fish meal (62% - Vietnam)	93.2	21.8	20.5	18.1	62.1	55.9	5.7					0.4
			Krill meal	92.9	13.0	23.0	17.4			18.0					1.6
			Meat & bone meal (48%)	94.6	33.6	18.0	11.7								
			Meat & bone meal (52%)	95.0 19.4	30.8 1.6	18.3 3.6	11.9 3.2		38.3	8.4 2.2					0.0
			Mussel (fresh) Mussel meal (dry)	91.8	1.0	18.1	3.2			8.4					0.1
			Poultry feather meal	89.2	5.4	20.1	9.0								
	<u> </u>		Poultry offal meal	90.0	8.0	22.0	15.4		52.8	14.0					
			Shrimp (Fresh)	24.1	1.2	4.4	3.5		18.0						
			Shrimp (Acetes) meal	93.1	15.2	16.0	12.8								1.8
			Shrimp head meal	94.0	25.8	16.6	12.5								
			Shrimp shell meal	92.6	30.4	14.0	8.4		33.0	7.0					
			Skim milk pwd	94.4	8.2	16	14.4	38	36.1	1	0				
		21	Squid (fresh)	21.4	1.4	3.9	3.4	15.6	14.8	1.4		-	0	0	
			Squid meal	92.7	8.5	18.0	15.2			11.9					1.2
			Trash fish (anchovy)	26.6	1.4	5.5	5.1	20.4	19.4	4.8					0.5
			Trash fish (mixed)	20.8	1.2	3.9	3.6		18.4	1.0					0.0
			Trash fish (whitefish-mix	27.2	1.1	5.6	4.8	19.1	18.1	5.9	0.2	0.27	0.18	0.20	0.3
		26		04.0		40.7					44.0	0.04	0.07	-	
lant protein meals			Canola Canona la firma al	91.0	6.8	18.7	14.0		34.3	4.0			0.37		
			Cassava leaf meal Chick pea	86.5 90.8		18.0 16.4	11.2 11.5				9.8 7.7	0.2			
			Copra (coconut) meal	90.0		16.5		19.2							
	<u> </u>		Cottonseed meal (expl)	92.4		16.5	10.1								
			Field pea	87.0											
			Gluten (corn)	92.9											
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