EKM
(MULTI-PLATFORM)
USER GUIDE

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EKM (multi-platform) User Guide

The major re-write of EKM (Electronic Ketogenic Calculator) in 2016 has enabled the program to be used within the following operating systems and platforms:

• Mac desktop OS X

• PC, Windows version 7 and above (Vista not recommended)

• Android: phone and tablets (non-Intel platforms recommended)

• iPad and iPhone; iOS

Therefore the majority of desktop and portable devices are supported by this new release of EKM. We can thank Matthews Friends for their sponsorship in the further development of the program to achieve this level of functionality.

NB: This new release is single user access (one user at a time only) and will not permit multi-user access (simultaneous) across a network.

This guide will take the user through the use of the EKM program.

Whatever platform you are using, the majority of the screens and menus will be the same with just minor changes from each version. After you have downloaded the application (different for each OS) and installed it you should have a EKM icon that will be used to launch the program:

After you launch the program the first time you will have to input your email address and a password (that will be issued to you by MicroMan2000 Ltd). Please enter a correct email address as we can then keep you informed of further updates or important fixes.

Opening screen:

The screen is split into 6 large rectangles or squares, depending on the size and resolution of your screen, and are in fact buttons.

The function of each button:

BUTTON 1:

This shows the 'About' information for the program.

BUTTON 2:

This takes you to the main part of the application for the calculation of the meals.

Full details of this will be provided later in this document. If you are using this on a touch screen device then you can swipe to the left or right to bring into view the three sections of this main screen.
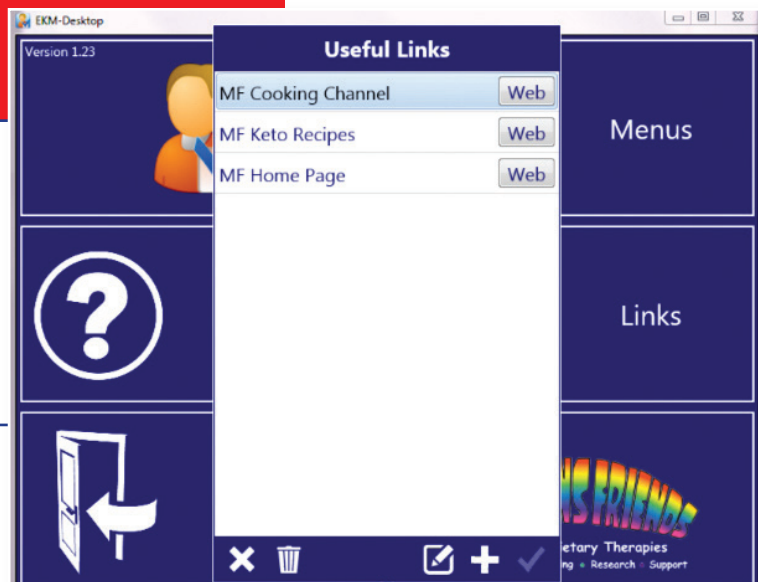
The function of each button:
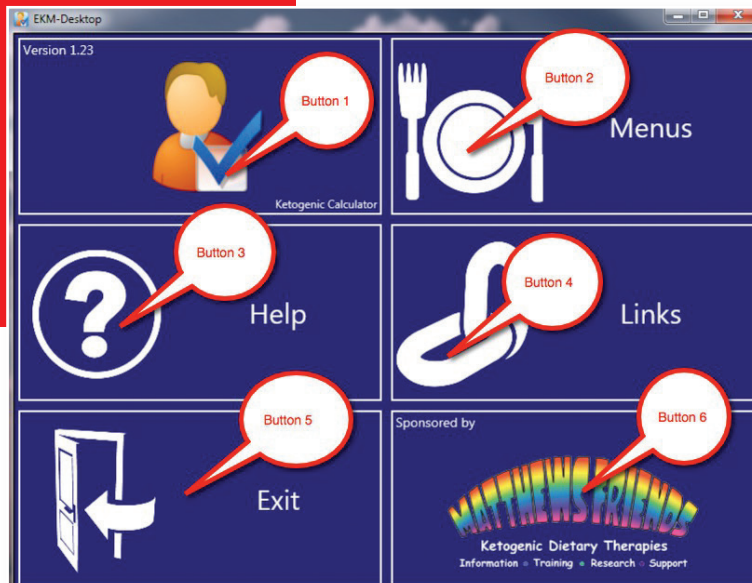
BUTTON 3:

This button will launch this document in it's PDF format and permit you to search and print the document.
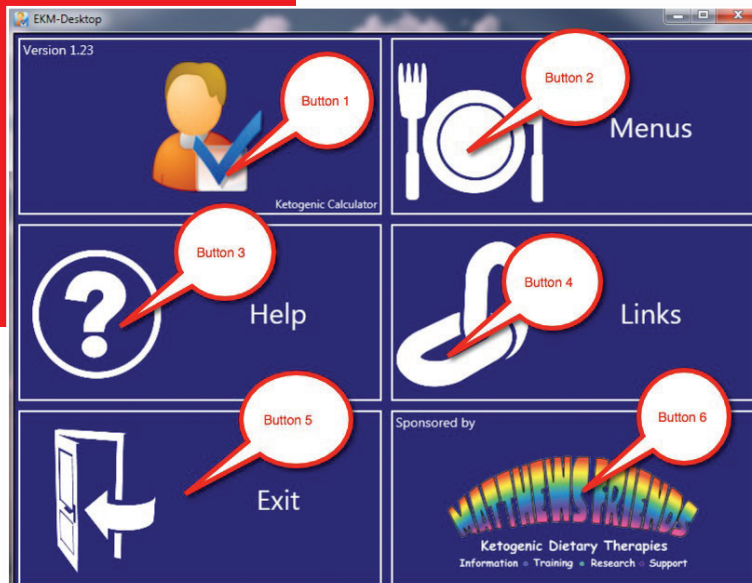

BUTTON 4:

Provides important links to web sites.

From this screen you can build up links to other resources you may require, such as supermarket web links to look up food values. The program is provided with the above three links to provide you with useful and important information from Matthews Friends.

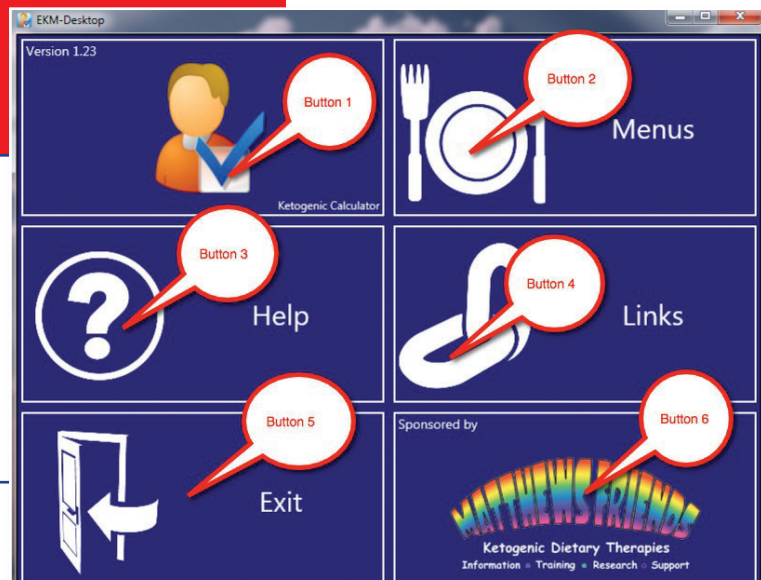# The function of each button:

BUTTON 5:

The Exit button will task you out of the program. On some platforms it will put the program into background mode and in other devices it will exit the program completely.

BUTTON 6:

This button details the sponsor of the EKM program and will take you directly to their web site (**www.matthewsfriends.org**)

Main meal screen

We will now discus the main meal screen and the various options within this screen. The program is structured so that multiple patients can be added and for each patient multiple meals can be created. The program has a products data set that is based on the McCance and Widdowson food data tables (7th edition) that can be added to by the user for local foods that may not be on the standard list.

Please note: The standard data is derived by testing many products of the same type and averaging the results. If you are using a specific brand of product, then you must enter the actual values for that product to get an accurate figure. The standard data is good for base foods such as vegetables, fruits and meats only.

If you only have one child on the diet then you can skip the adding of patients as all data will be stored in the default data set. The main menu for all options on this meal screen are listed below.
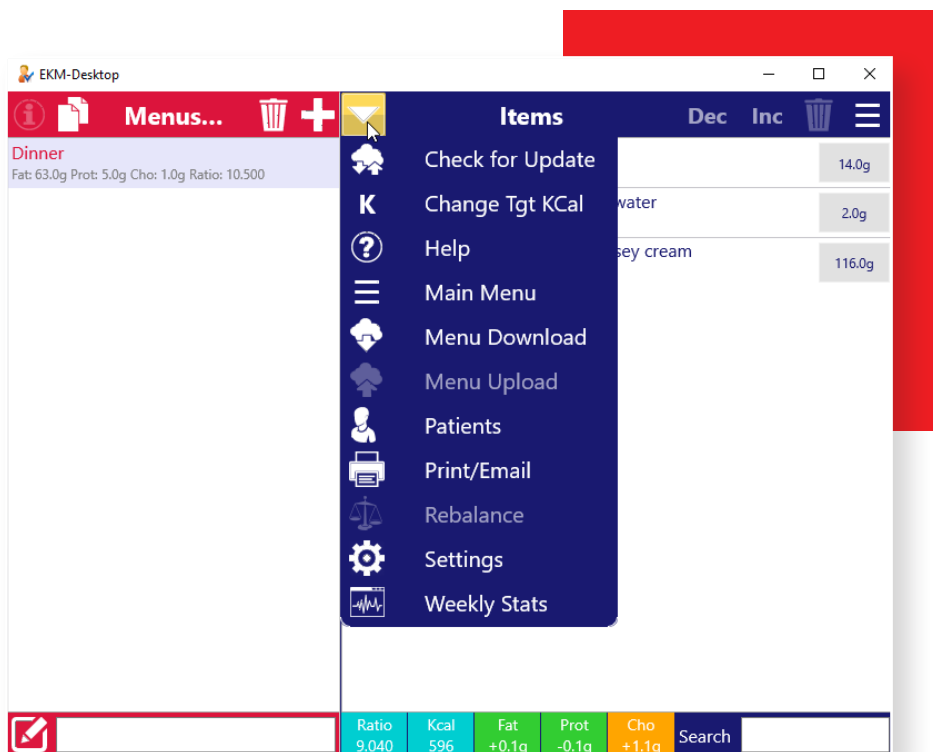
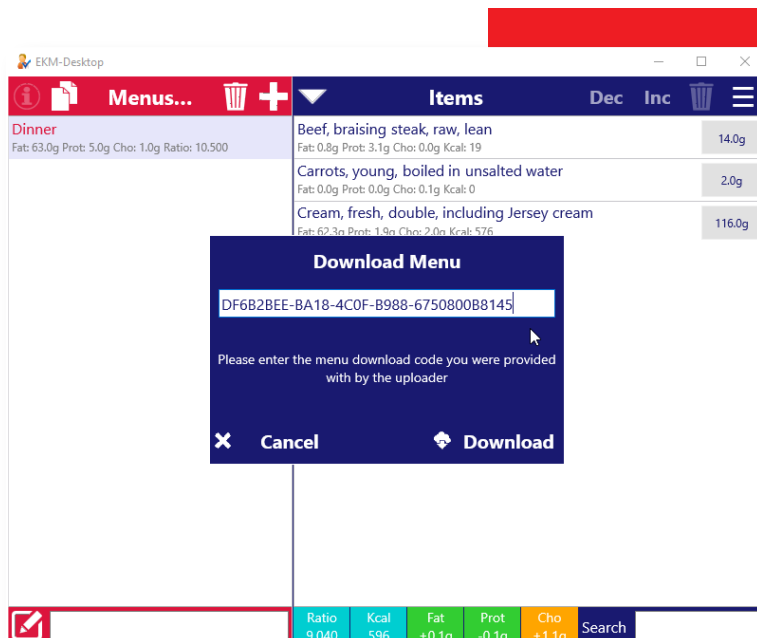| **CHECK FOR UPDATE:**	**HELP:**	**MAIN MENU:**
This will not be available on all platforms, but if it is available then it will check the web for any program updates.	This option will show the help file.	This option will take you back to the opening screen.

Menu download

If another user of the EKM program wishes to share a meal plan then they will send you a unique string that you can enter in this box to download that meal plan, you must have an internet connection to do this:
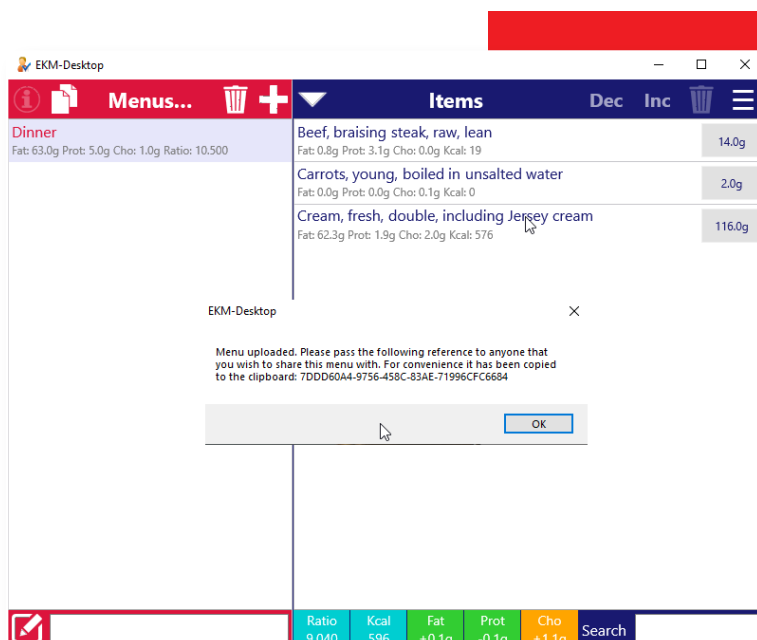
If they have added product items that you do not have in your system then these will be added to your products table.

Menu upload

You can upload your menu to the web where you will be given a unique ID to share with your dietitian or parent for them to be able to download this meal plan to their program, you must have an internet connection to do this:

As the note says, the link ID is automatically put into your clipboard so you can then mail or message this link to another person and they can then download the meal plan.

Patients

This is where you may add multiple patients so that if you have more than one child on the diet then each patient can have a separate data set:
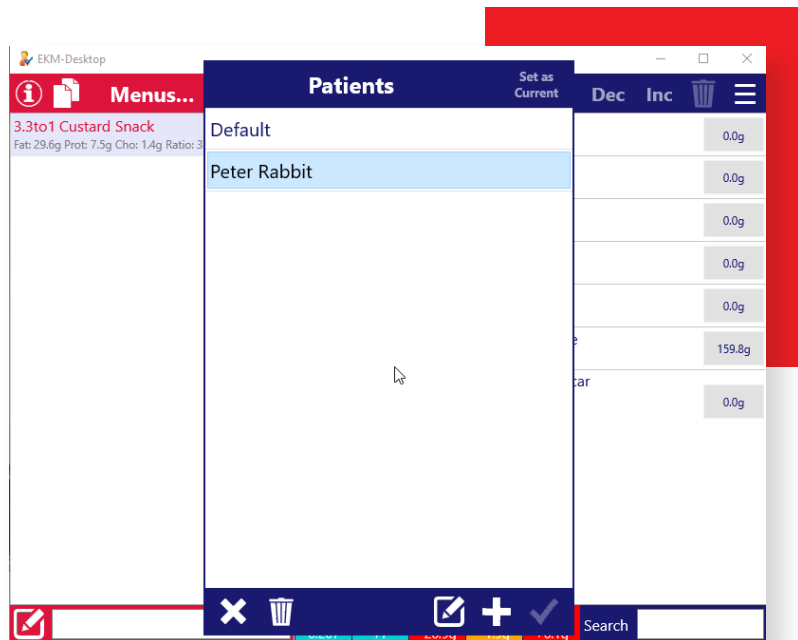
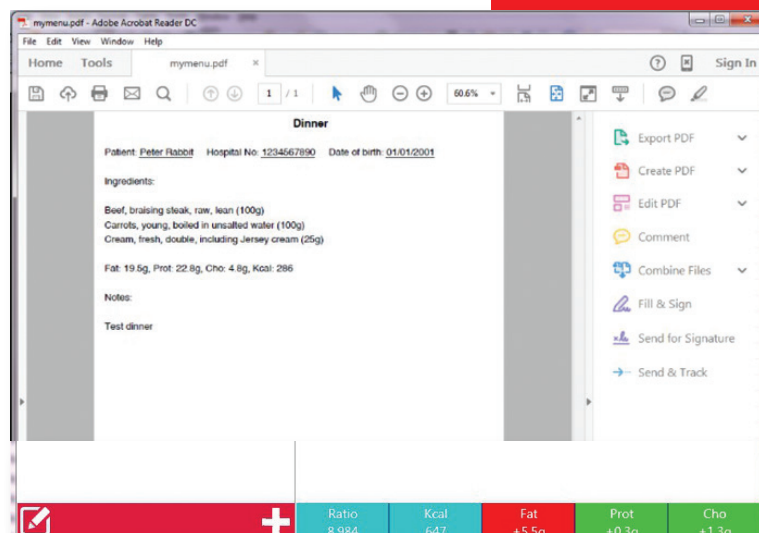Basic information regarding the patient can be entered from the following screen:

The current patient to be worked with is selected from this option:

Print/Email:

The meal plans may be printed, stored as a PDF file or sent, via email, to another person:

If they have added product items that you do not have in your system then these will be added to your products table.

Rebalance:

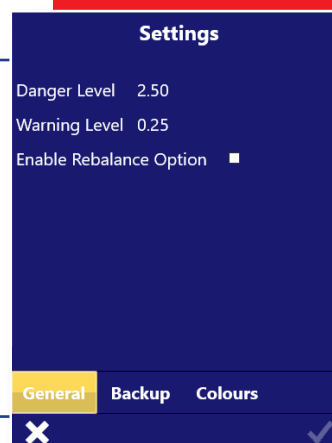This option will only be enabled if the target values are entered for the meal plan and the meal has at least three items added. The option will try and auto-calculate the values of the products to produce three green traffic lights which indicates the right values for the products in the meal. It does not mean that if you cooked these items it would make a proper meal, just that the ratio would be correct for the targets set.
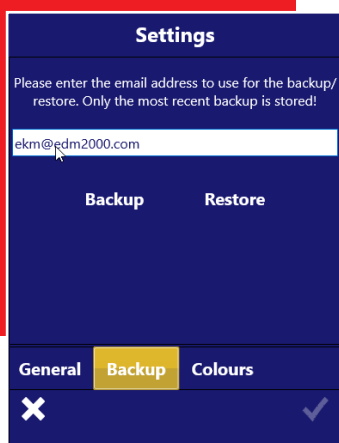
Settings

There are two key settings tabs: General and Colours. General tab is used to set the levels for then the traffic lights change to amber (warning level) and red (danger level):

Most users will keep to these settings but if the patient is very sensitive to level variation then you may need to set low levels for the warning colours.

Settings, new option 'Enable Rebalance Option' – this is off by default and can be selected if the rebalance option is required.

Settings

Danger Level   2.50

Warning Level   0.25

Enable Rebalance Option   ☐

General   Backup   Colours

Settings

Please enter the email address to use for the backup/restore. Only the most recent backup is stored!

ekm@edm2000.com

Backup   Restore

General   Backup   Colours

The backup option backs up or restores all the data from the local device to/from the cloud. This can be used as a simple backup and restore feature. If the user changes phones then as long as a backup is done first then it can be restored onto the new phone.

If a new device is being used then an existing set of meals can be backed up from the old device and then restored onto the new device. Please remember the email address you used to backup the data as that is the address you need to use for the restore. Also note that the restore overwrites any existing EKM data on the device you are using EKM on when you restore."

Settings

Main   Menus   Products

The Colours tab will permit you to set any of the screen colours for the application to your own preference:

General   Colours

Daily/Weekly Stats

The daily and weekly stats screen will permit you to record various details regarding the symptoms of the patient so that this can be accurately reported to your dietitian to assist with the fine tuning of meal plans.

The form above can be completed on a daily basis: notes, seizures numbers, ketones and glucose levels can be recorded. To change the values the arrows on the left and right of the required boxes can be clicked to increase or decrease the values. The arrows next to the patient name can be used to select different patients. To change the type of measurements taken for Ketones or Glucose then click on the actual number and the letter will change from U (Urine, default) to B (Blood).

If the 'Weekly' button is clicked then these further details can be entered:

Weekly notes screen

The first three boxes permit free text entries to be entered for each section. The current weight can be entered. These notes are stored as one set of notes per week.

Weekly notes screen continued

From the above screen the envelope symbol can be clicked and the following PDF file is viewed. From this, the report can be printed or emailed to your dietitian or consultant.

WEEKLY MONITORING

Name: Default   Week commencing: 09/05/2016   Weight at end of week: 0.0 kg   MATTHEW'S FRIENDS CLINICS

| Date | Day | Number of seizures of each type | | | | | | | Blood or urine ketones | | Blood glucose | | Comments on any illness or changes to diet, activity or medication |
		1 Abs	2 Myo	3 Drop	4 Tonic	5 T/C	6 Focal	7 Other	AM	PM	AM	PM	
09/05/2016	Mon												
10/05/2016	Tue												
11/05/2016	Wed												
12/05/2016	Thu												
13/05/2016	Fri												
14/05/2016	Sat												
15/05/2016	Sun												
Total		0	0	0	0	0	0	0					

Any School days missed because of seizures:

Any days that parents or carers were unable to do scheduled work because of seizures:

Any seizure-related hospital admissions or visits to the accident and emergency department:

09/05/2016 16:42

How to add and calculate a meal

Now we have explained the general screen within EKM we will now explain how to use the program in calculating actual meals.

The meal has two main sections:

1) Meal header details: This is where the target details for the meal are stored.

To enter a meal the following details will need to be added:

Name: This is a free text entry and will normally be a description of the meal, it could include the date, if you wish to track meals on certain dates.

Note: All targets are normally provided by your dietitian or medical team.

Fat target: This is the target value for fat in the meal. In grey next to this figure is the calculated level of fat in the current meal. The edit button isused to change this target value:

Protein target: This is the target value for protein in the meal. In grey next to this figure is the calculated level of protein in the current meal. The edit button is used to change this target value.

CHO target: This is the target value for CHO in the meal. In grey next to this figure is the calculated level of CHO in the current meal. The edit button is used to change this target value.

To edit the above three figures you will need to click on the edit buttons. The following screen will be viewed after clicking on the edit button.

To change the figure it is best to click on the 'Clear' button and then enter the new value.

Once you have entered the new value click on the 'Done' button.

How to add and calculate a meal continued

Kcal: These numbers are in grey and are calculated figures only, the first is target calculated from the target figures and the actual figures from the meal details.

Ratio: These numbers are in grey and are calculated figures only. The first is target ratio calculated from the provided figures and then the actual figures from the meal details.

Notes: This is free text and can contain instructions on how to cook the meal and other general information.

Once this information has been all entered then you can begin to add products to a meal.

To close the screen, click on the tick button in the bottom right hand corner of the screen.

Selecting products

To open the products screen you need to click on the icon in the top right hand corner of the 'Items' screen.
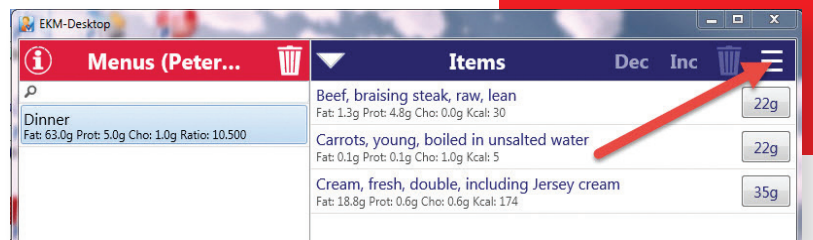
Once this button is clicked, the following screen is viewed.
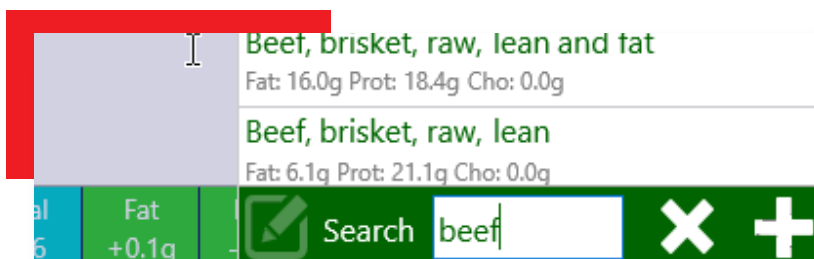
You can now start to filter and select products to be added to the meal.

The Search button is now on bottom of the screen.

Selecting products continued

By entering a short word to filter the products you can scroll through the list. Once you have selected the product you need, click on the 'Add to Menu' button to add the product to the meal. By default the value of the product will be zero. You can then click on the button with the value on to change it or click on the 'Dec' (Decrease) or 'Inc' (Increase) button to change the value by a gram on each click.
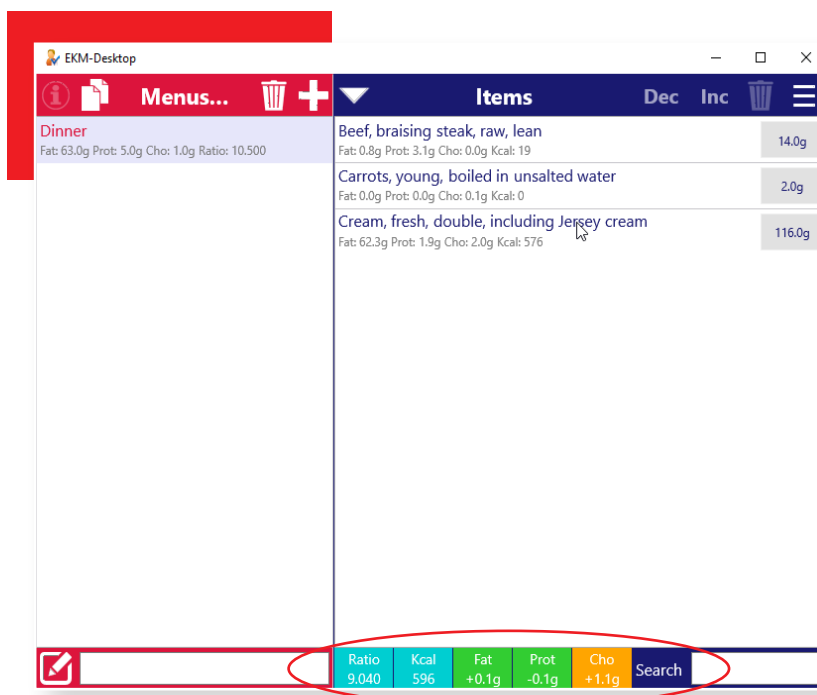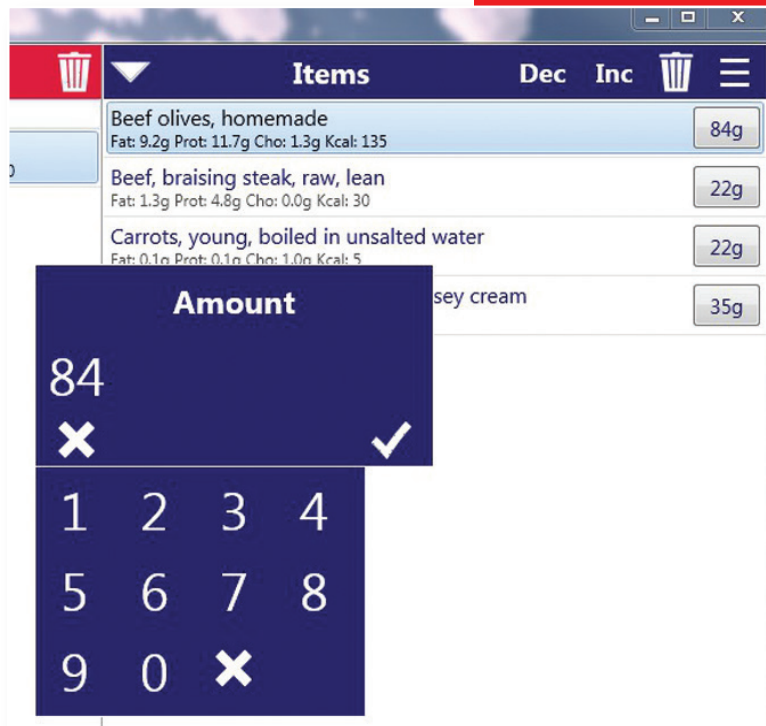
To build the complete meal you will need to add each product and set the values until you have three traffic lights at the bottom of the screen:

Once the meal has been entered and the actual values are balanced then you can print out the meal or email to another person (normally your dietitian, if they wishe to check the details). To do this, click on the Down arrow symbol at the top left corner of the Items screen and select 'Print/Email'. This will then produce a PDF report of the meal that you will be able to print or email. A sample of the report is at the beginning of this help file.

You can also use the 'Rebalance' option within the same drop down menu to try and have the program automatically balance the product values. If there are more than three products this will struggle to get a good balance but it is useful to use sometimes.

To remove a product from the meal just select the product and click on the dustbin symbol on the top line of the 'Items' window.

Products

EKM comes pre-loaded with products from McCance and Widdowson food data tables (7th edition). However, as mentioned before, you must add the specific details of the branded items that you may use on a daily basis.

A product is ANY item that can be given to a patient to consume. Any food item, drink or even medication can be entered into this table

and then the patient intake can be analysed. It is very important to enter the correct values for double cream from your locality and this changes from region to region and supplier or shop. As double cream is used in a lot of ketogenic recipes then this should be one of the first items to either update or enter for the specific supplier you buy from.

To do this you can click on the '+' button on the Products screen or you can update/edit the current selected product by clicking on the edit button.
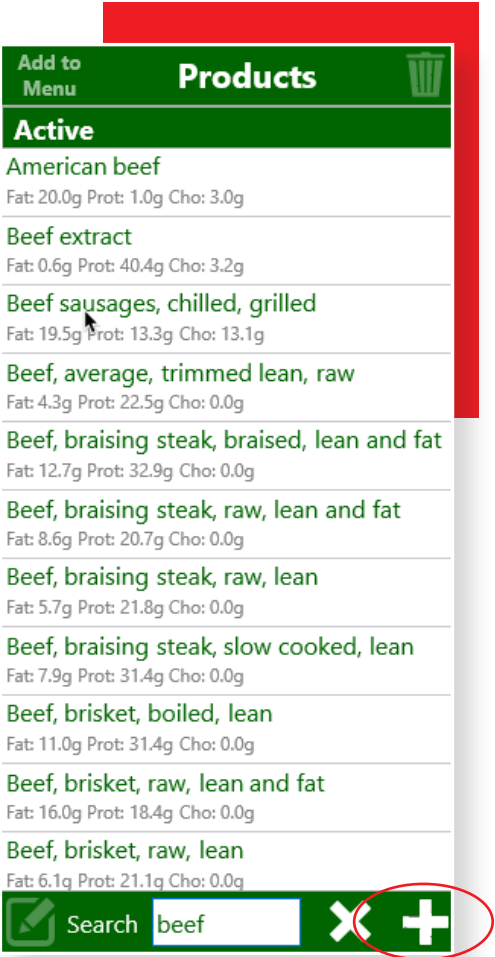
Products continued

NB: Some of the products that are in the full McCance and Widdowson list have been already set as inactive. This is done for foods that are normally not suitable for the ketogenic diet. These include such things as ready made meals, alcohol and fruit cooked or canned in sugar. Fried foods have also been inactivate as we would expect the accurate fat value to be calculated separately in the diet. If,

however, you need to use some of these foods then they can be simply enabled and used but they must be used with understanding and caution. The McCance and Widdowson data uses an average value for a range of sample food products. **If in doubt about an individual food value it is strongly recommended that the composition details from the food label are recorded and added to the products table.**

This is the edit screen for products.

Please note that all values are per 100g even if the product is a liquid. You can also add a hyperlink to a web page where this data is stored so you can check for any changes over time.

Windows installation example

Once the setup.exe file has been downloaded then double click on the file and this screen should appear.

Please click on the Next button. You will be provided with the License agreement, if you do not agree then you will be taken out of the installation.
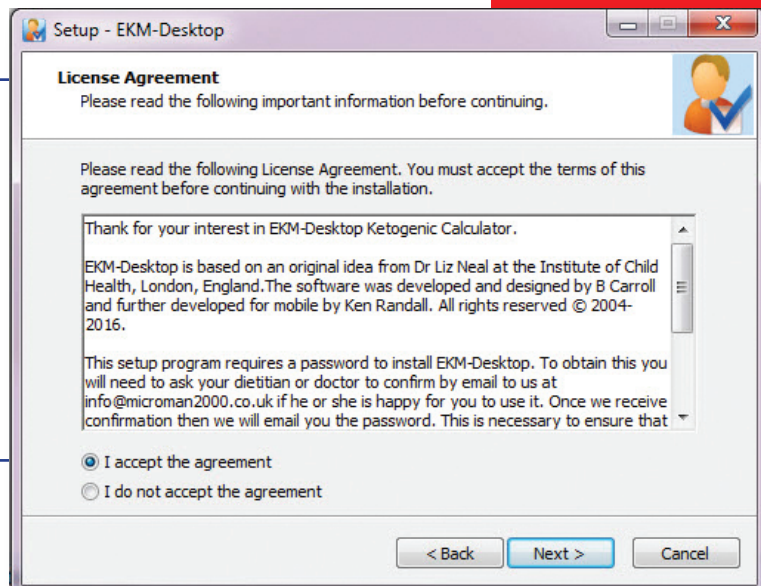
Windows installation example continued

On the next screen you will have to enter the password you should have been provided with. If you do not have the password then please request it from **ekm@microman2000.co.uk.**
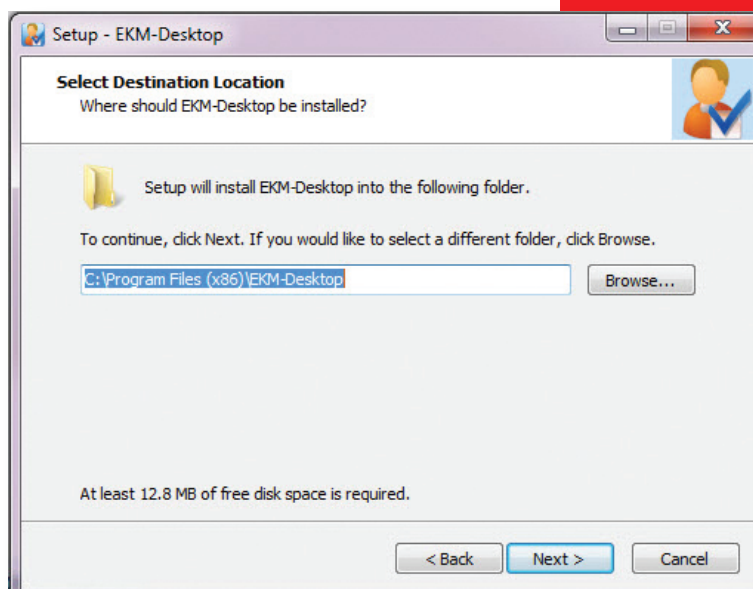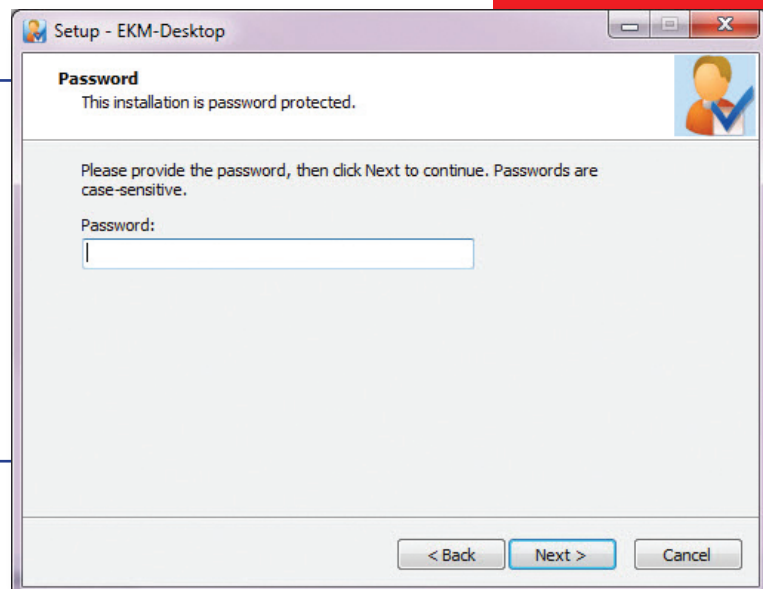
If you do not have the correct password then you will not be able to proceed further. The next screen will show the default destination for the installation. Unless you have a very good reason to change this then leave it as it is and click the Next button.

Please then confirm the selected install path.

Setup - EKM-Desktop

Select Destination Location
Where should EKM-Desktop be installed?

Folder Exists

The folder:

C:\Program Files (x86)\EKM-Desktop

already exists. Would you like to install to that folder anyway?

Yes   No

< Back   Next >   Cancel

Setup - EKM-Desktop

Completing the EKM-Desktop Setup Wizard

Setup has finished installing EKM-Desktop on your computer. The application may be launched by selecting the installed shortcuts.

Click Finish to exit Setup.

☑ Run EKM-Desktop

EKM-Desktop
MicroMan2000 Ltd

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Finish

Once the files have installed you will see the final install screen.

At this screen I would recommend you un-click the 'Run EKM-Desktop' option so that the nsetup program can close. You can then run EKM-Desktop from the desk top icon.

You should now of successfully installed EKM-Desktop.

Windows installation example continued

When you first run the program and click on button 2 (Menus) you will have to enter your email address and the password again and click on the 'Activate' button to enable the program to work fully:
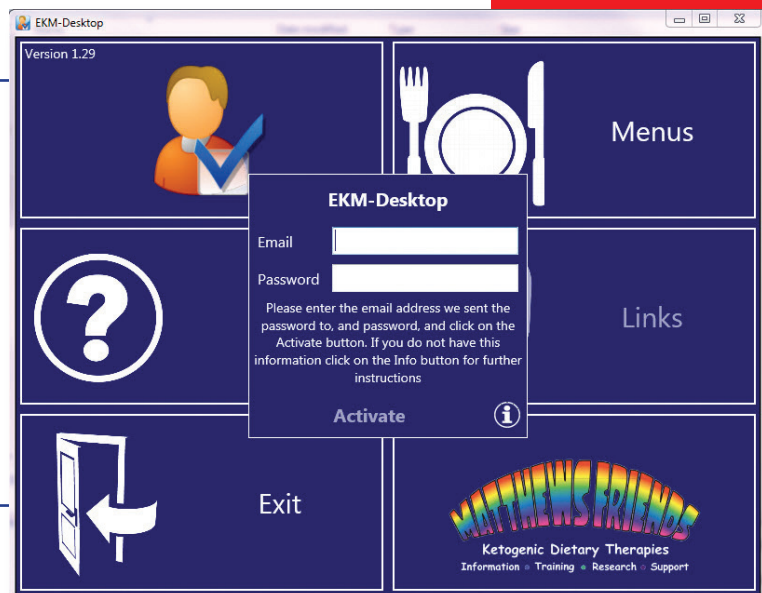
Please ensure you enter your correct email address so we can keep you informed of any updates or fixes to the program.

Notes

Notes

Copyright and Legal Notices

EKM is based on an original idea from Dr Liz Neal at the Institute of Child Health, London, England. The software was originally developed, designed and written by Bruce Carroll of MicroMan2000 Ltd - all rights reserved – 2004. It was re-written in 2016 by Ken Randall for MicroMan2000 Ltd to run on multi-platforms.

The products table uses nutritional data from the Composition of Foods -FSA-© Crown copyright. Reproduced with the permission of the Controller of HMSO and Queen's Printer for Scotland. Use is limited to individual and personal use only.

This software is supplied free of charge to all parents with children who are on a medically supervised ketogenic diet and the dietitian that is administrating that diet. It is not to be sold or marketed separately.

Note for dietitians: This software is the smaller brother of a much larger system that is designed for modular feed production within a hospital environment. The system, EDM (Electronic Dietetic Manager) is used in the majority of paediatric hospitals throughout England and Ireland. Please visit our web site at **www.edm2000.com** or **www.edm3000.com** for full details.

Disclaimer:

No liability is accepted for the incorrect use or errors or omissions in the software. It is your responsibility to ensure the accuracy of the data you use, input, or change within the software.

Trade marks and Registered names:

All Trade marks and Registered names mentioned in this document are fully acknowledged.

Sponsorship:

The program development was fully sponsored by Matthews Friends. Support costs are sponsored by Vitaflo.

Editors note: If you find any errors or omissions then please contact us so that we can correct this and ensure we all benefit from a full and accurate help file. Email us on **ekm@microman2000.co.uk**.

Matthews Friends

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