

ACTIVITIES ANALYSIS

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Introduction to "ACTIVITY"

The adaptation in the **ideal bodily weight**, except of the **diet**, is combined essentially with the suitable **physical exercise** and **activity**, so that is **adapted** rightly, i.e. to be **decrease the fat** and **increase the muscular tissue**. In the case of muscular tissue reduction, **would be influenced negatively the metabolism**. For the determination of suitable individually **physical exercise** and **activity**, the program "**ACTIVITY**" is used.

The daily trophic needs are covered with a flexible composition diet, adapted in the nutritional preferences of each individual, taking into consideration the **Hellenic nutritional habits and way of life**. The composition of meals is determined according to the **caloric needs**, but also by the requirements in **proteins, lipids, carbohydrates, trace elements, vitamins, και amino-acids**. For the composition of meals analysis, the application "**NUTRITION**" is used.

The designation of the daily needs of diet is obtained with the program "**HARMONY**", with which the **ideal bodily weight** is determined, based on the **gender**, the **age** and the **height**. The **ideal bodily weight** results from parameters that have relation with the **Body Mass Index (BMI)**. The daily caloric needs are determined by the **body type** and other parameters.

The group of the above programs (**HARMONY, NUTRITION, ACTIVITY**), has resulted from documented researches of **Dr Konstantinos N. Pavlou Sc.D., FAAKPE** in Medical schools of **HARVARD** and **BOSTON** in the U.S.A., in combination with all the current knowledge in the relative subjects.

The content of program "**NUTRITION**" it is:

[Generally about activities](#)

[Activities selection for analysis](#)

[Activities proposals to burn calories](#)

[Activities groups](#)

[Activities group selection](#)

[Individual basic elements](#)

[Gender](#)

[Weight](#)

[Activities analysis](#)

[Duration of activity](#)

[Activities analysis table](#)

Activities analysis manual

Manual title

Manual creation

Manual retrieval

Various operations

Language selection

Handbook printing

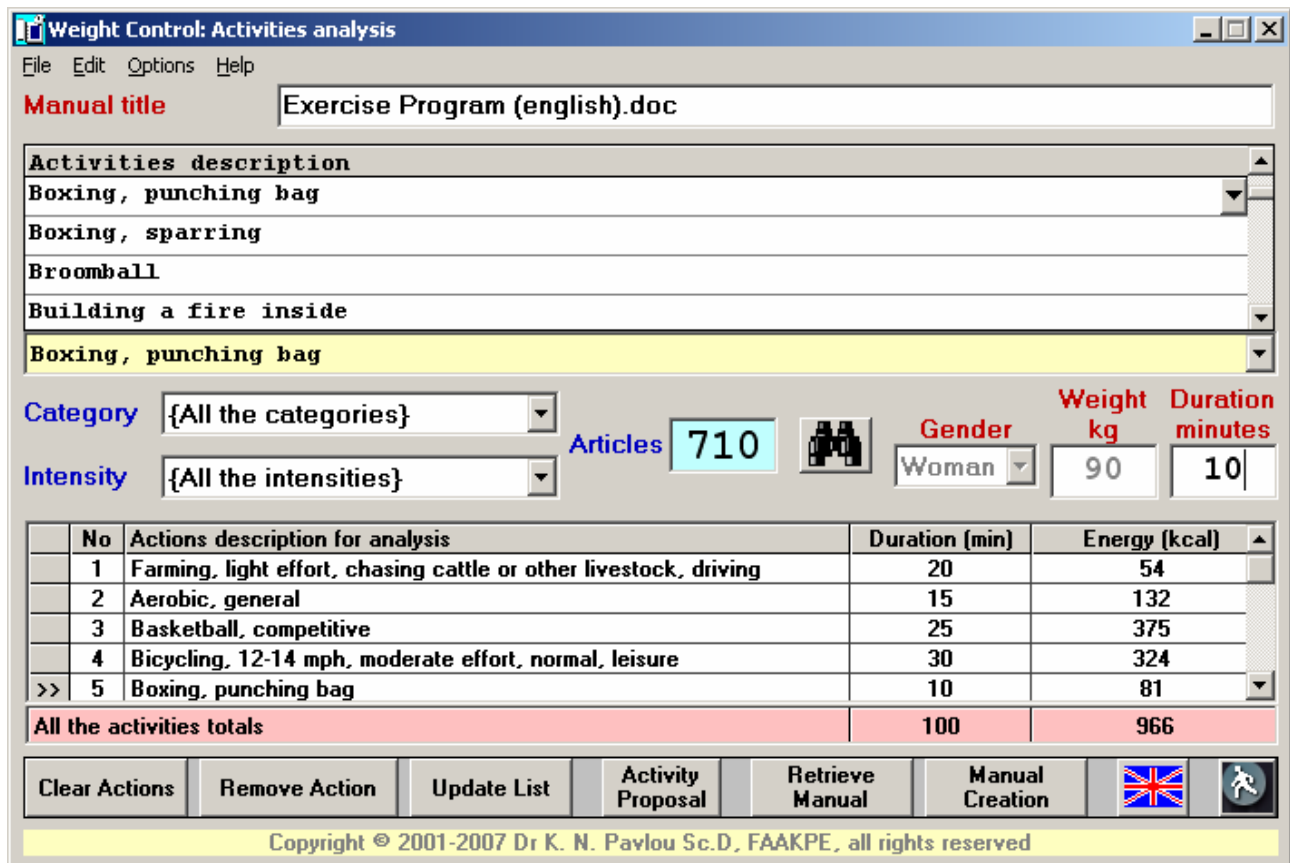
License of use registration

About the application

Termination of the application

Activities analysis manual example

General program description



The program "**Activity**" includes the following sections:

- [Generally about activities](#)
General information and selection
- [Activities grouping](#)
Activities groups based on **type** and **intensity**
- [Activities analysis](#)
Activities table and preview of the basic analysis elements
- [Activities analysis manual](#)
Manual issue and preview
- [Various operations](#)
Language selection
Handbook printing
License of use registration
About the application
Finiss of the application

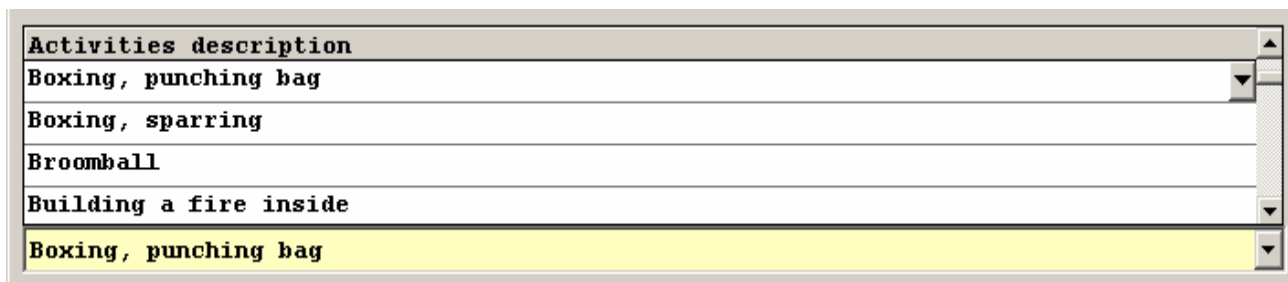
Generally about activities

The **energy** (calories) that it is consumed with the exercise is influenced by the **gender**, the **bodily weight**, the **intensity of effort**, the **natural state** and the **metabolism of the individual**. Should consequently the program of activities ***be different for each person***, taking into consideration the **usual daily activities** and the **required exercises** for the control of weight and generally the achievement of desirable result.

In the exercises database they are included a lot of activities, in various intensities of effort. The calories have been reported by the **Medicine and Science in Sports and Exercise**, The Official Journal of the American College of Sports Medicine, and they have been supplemented by many publications of **Dr Konstantinos Pavlou Sc.D., FAAKPE**.

The selection of activities for analysis becomes by the [activities catalogue](#).


Activities selection for analysis

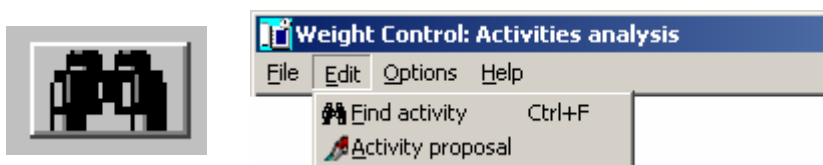


The choice of activities for analysis becomes basically by the selection table, in which are included all the activities of the selected [activities group](#).

The selected activity is marked with the ▼ activity indicator.

Alternatively the choice can become via the list of activities (**yellow**, below the activities selection table).

Fast selection can be done also with the  **activity search button**, or by the menu choice **Edit** → **Find activity** or by the keys {Ctrl+F}.



The choice can become also (it is recommended) via the process [suggested activities](#) by the button:



The activity search can become with the **initial letters of activity (one or more)**, and it is limited in the activities of the selected [activities group](#).

The input of activity in the [analysis table](#) it becomes automatically or with the choice [duration of activity](#), or by the button **Update List**.

Activities proposals to burn calories

Suggested activities to burn calories

Proposed activities 107

No	Time	Activity
1	59	Canoeing, harvesting wild rice, knocking rice off the stalks
2	59	Carpet sweeping, sweeping floors
3	59	Walking in church, 3.0 mph, moderate speed, not carrying anything
4	59	Walking on job, 3.0 mph, moderate speed, not carrying anything
>>	59	Walking, 3.0 mph, level, moderate pace, firm surface
6	56	Archery, nonhunting
7	56	Bathing dog, standing
8	56	Calisthenics, light/moderate effort, back exercises, going up & down from floor
9	56	Canoeing, rowing, general, leisure
10	56	Carpentry, general

Weight (Kg)
 Time available (minutes)
 Calories to burn (Kcal)

Gender
 Grouping

Entries - Data

- **Weight** **Necessary** (Predefined)
- **Gender** **Necessary** (Predefined)
 - Man
 - Woman
- **Duration** **Necessary choice**
 - It concerns in the total available time.
 - Minimum (at least 10 minutes)
 - Maximum (at least as the minimum)
- **Calories** **Necessary choice**
 - It concerns in the total calories to burn (at least 50 Kcal)

To build the proposed activities table, are required the **weight**, the **gender**, the **available time** (minimum and maximum) and the **calories** to burn. The weight and gender are transferred automatically by the main application.

By the **Catalog** button the table is build. The activities number appears in the above right corner of table. By the **Accept** button the selected activity (>>) is transferred automatically to the main application. By the **Finish** button the process is terminated (the selected activity is ignored).

In the table appear the **required time** for the complete consumption of calories and the **description** of activity. The proposed time of the selected activity can be decreased afterwards the acceptance, therefore are decreased proportionally and the calories that will be consumed.

Is recommended the transfer of selected activity (>>) by the **Accept** button, the potentially reduction of duration, and the repetitive use of suggestions process, with the corresponding each time automatic adaptation of remaining time and the calories to burn. . By the choice **Grouping** before the first group activity is chosen, the repetitive process is activated.

Repetitive use of activities suggestions procedure

For man **80** kg bodily weight, available time **100** minutes, **500** calories to burn

Analysis table					Suggested activities choice			
	Activity		Totals		Data		Activities proposal	
Step	Duration	Energy	Duration	Energy	Time	Energy	Duration	Activity
0					100	500	99	Bicycling, 5.6 mph
1	30	152	30	152	70	348	65	Gymnastics, artistic
2	25	133	55	285	45	215	35	Walking on hard ground
3	20	123	75	408	25	92	23	Bowling
4	23	92	98	500				

The results of the repetitive procedure are show in the analysis table

No	Actions description for analysis	Duration (min)	Energy (kcal)
1	Bicycling, 5.6 mph	30	152
2	Gymnastics, artistic	25	133
3	Walking on hard ground	20	123
4	Bowling	23	92
>> 5			
All the activities totals		98	500

Activities groups

The activities are **grouped** by the user, so that is easier the selection for the creation of programs of **activities** and **exercise** for analysis. The activities are grouped based on the **type** and the **intensity**.

The [group selection](#) becomes through the categories and intensity lists.

Activities group selection

The selection of group of activities becomes easily through the lists of choices. In the choice by **category**, the regrouping concerns in **similar type activities**. With base the **intensity**, the activities have been grouped in **intensity zones**, independent the type.

In the group **{All the categories}** and **{All the intensities}** are included all the activities of database. It can become any combination of category and intensity.

For the selected group appears the **number of activities** that he includes the selected combination of category and intensity.

Mark that any activity can be included in more than one category.

Provided that the process of **activities proposal** is activated, is **selected automatically** the complete list (All the categories, All the intensities).

Group	Intensity
Bicycling	Resting
Conditioning Exercise	Inactivity (BMR)
Dancing	Very light
Fishing and Hunting	Light
Home Activities	Moderate
Home Repair	Heavy
Inactivity Quiet	Exceptionally heavy
Inactivity Light	Sports (competitive)
Lawn and Garden	All-out training
Miscellaneous	Extended maximum effort
Music Playing	
Occupation	
Running	
Self Care	
Sexual Activity	
Sports	
Transportation	
Walking	
Water Activities	
Winter Activities	
Religious Activities	
Volunteer Activities	
Weight Control Centers	

Basic elements of individual



A screenshot of a form with three input fields. The first field is a dropdown menu labeled 'Gender' with 'Woman' selected. The second field is a text box labeled 'Weight' with '90' and 'kg' below it. The third field is a text box labeled 'Dura' with 'min' below it.

It includes elements of individual that are required for the program **"ACTIVITY"** and are the follows:

- [Gender](#) **Necessary**
It affects in the estimation of calories
- [Bodily weight](#) **Necessary**
It affects in the estimation of calories

Gender



Entry: **Necessary** (Default: **Man**)

The selection becomes by the list of choices and it is combined with the [bodily weight](#) and the [duration](#) of each activity for the estimation of calories that will be consumed.

Bodily weight

	Weight	Dura
er	kg	min
1	90	

Entry: **Necessary**

It defines the **bodily weight** that will be used in the [analysis table](#), and it is combined with the [gender](#) of individual and the selected [duration](#) of each activity for the estimation of calories that is consumed.

Activities program analysis

The analysis of program of activities concerns in the **determination of composition of a group of activities** that on one side it leads to the **consumption of calories** that it is desirable, and on the other side to correspond in the **needs and the preferences of each individual**.

Basic elements for the analysis are the **gender**, the **bodily weight** and the [duration of activity](#).

The analysis becomes by the [table of analysis of activities](#).

Duration of activity

Weight kg	Duration minutes
70	10

Entry: **Necessary**

It defines the **duration** of activity that will be used in the [analysis table](#), and it is combined with the [gender](#) and the [bodily weight](#) of individual for the estimation of calories that will be consumed.

Activities analysis table

No	Actions description for analysis	Duration (min)	Energy (kcal)	▲	
1	Farming, light effort, chasing cattle or other livestock, driving	20	54		
2	Aerobic, general	15	132		
3	Basketball, competitive	25	375		
4	Bicycling, 12-14 mph, moderate effort, normal, leisure	30	324		
>>	5	Boxing, punching bag	10	81	▼
All the activities totals		100	966		

The activities table determines the composition of activities that will be analyzed. It can include up to **20** articles.

At the end of the table the totals of the **duration** and the **energy** are displayed. They are updated dynamically by the [selection of activities](#).

The handling of activities of the table becomes by the operation buttons as follows:



By the press of button **Clear Actions** the table is cleared completely and the indicator **>>** is placed in the beginning. The information table is **cleared completely** also.

By the press of button **Remove Action** is removed the activity that is the indicated by **>>**. The information table is **automatically synchronized**.

By the press of button **Update List** is updated the activity that is the indicated by **>>**, or is imported a new activity if the place is empty. The same result is achieved with the keyboard key (**Enter**) at the **duration** entry box.

The activities of table determine the content of [analysis manual](#).

Analysis manual

In the **analysis manual** all the information on the determination about the right activities and exercise program is included.

The **manual subtitle**, as well as its **proposed name** is defined by the selection [Manual title](#).

The manual issue is determined with the choices of the [Analysis manual creation](#).

By the selection [Manual retrieval](#), any Word document can be loaded.

Manual title

Manual title	Exercise Program
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Entry: **Necessary**

It defines the title of manual that will be used as **subtitle**, and as **proposed name** of the issued Word document.

Analysis manual creation

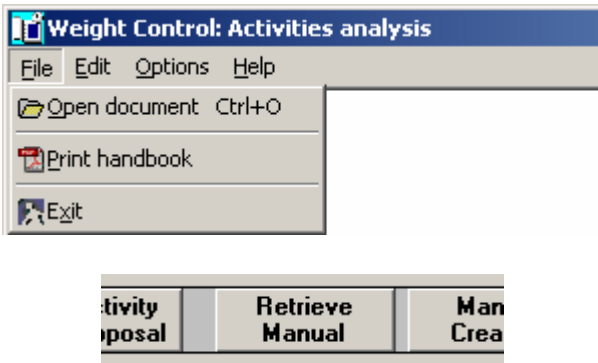


The manual of analysis of an activities program can be produced in two languages, **Hellenic** and **English**, depending on the [language](#) that it has been preselected.

It includes all the activities of the [Activities analysis table](#).

The analysis can include one or more activities (**up to 20**).

Manual retrieval



By the button **Retrieve Manual** or the menu selection **File** → **Open document**, or the keys **{Ctrl+O}**, any **Word** document can be retrieved.

Various operations

The following operations are included:

- [Language selection](#)
- [Handbook printing](#)
- [License of use registration](#)
- [About the application](#)
- [Finish of the program](#)

Language selection

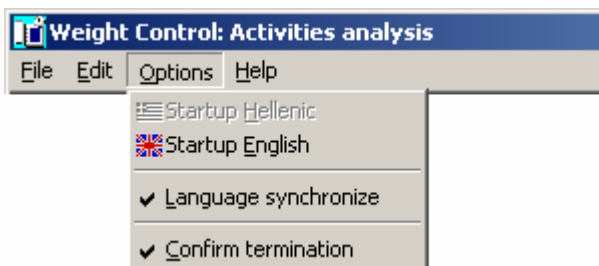


The languages that can be selected are the **Hellenic** and the **English**.

The active language changes each time the **language button** is pressed. The active language is shown by the **button flag**. It changes also with the usual way of Windows, provided that has been activated by the **Language synchronize** (menu: → **O**ptions).

The choice of language concerns in the **keyboard**, the **appearance of all labels and messages** of the application "**Activity**", as well as in the content of **database fields**. It determines also the manual **printing language**.

It can be defined the start-up language of application from menu by the button **Options**.

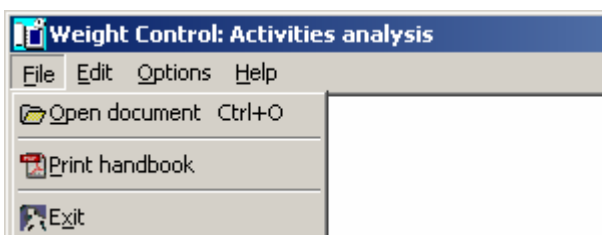



The **language cannot be changed**, while is not empty the **activities analysis table** (button **Clear Actions**).

With the selection **Language synchronize**, the language of application changes whenever the system language is changed. **Generally is not recommended the activation of this choice**, because **will not be possible the simultaneous typing Hellenic and English characters**. It is used only to avoid a mixed use of both the languages, as well as for **activities searching** in the alternative language. In any case, the **momentary** language synchronization is suggested.

Handbook printing

The application **instructions handbook** contains all the information on the operation of activities and exercise analysis program.



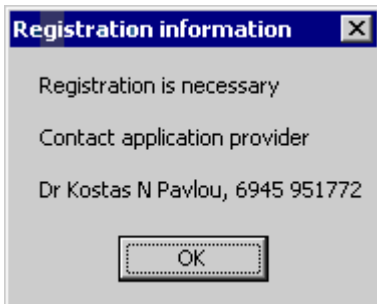
The book is in  **PDF** format and it can be recalled and printed out with the selection **File** → **Print handbook** of menu choices.

With the choice **Print handbook**, the guide handbook is recalled and it can be printed out freely.

You will need the [Adobe Reader](#)[®] viewer to print this handbook.

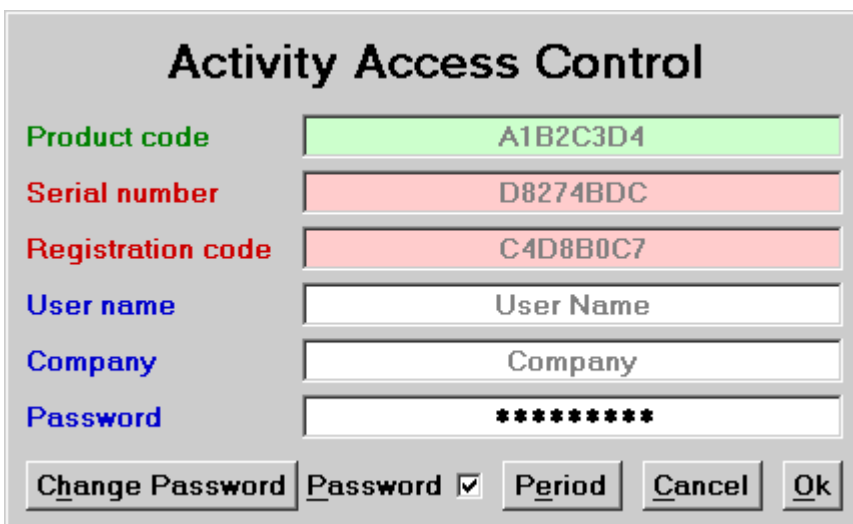
License of use registration

The legal use of the program presupposes the user registration.



For a user to be registered, it is required to ask by the owner of the application the **license of use**.

For the activation of registration, the user should be in contact by phone with **Dr Konstantinos Pavlou Sc.D**, to the mobile **6945-951772**, with care of which will be installed the application in the user's system.

A dialog box titled "Activity Access Control" with a grey background. It contains several input fields and buttons. The fields are: "Product code" (green background, value A1B2C3D4), "Serial number" (red background, value D8274BDC), "Registration code" (red background, value C4D8B0C7), "User name" (white background, value User Name), "Company" (white background, value Company), and "Password" (white background, value *****). At the bottom, there are buttons for "Change Password", "Password" (with a checked checkbox), "Period", "Cancel", and "Ok".

The elements of the registration are:

- **Product code**
It is granted at the installation and is unique.
- **Serial number**
It is produced by the system and is different each time it is attempted a registration.
- **Registration code**
It is connected with the **Product code** and the **Serial number**. It is granted from the owner of the application.
- **User name and Company**
They are determined by the user at the initial installation. They can be changed only from the owner of the application.

- **Password**

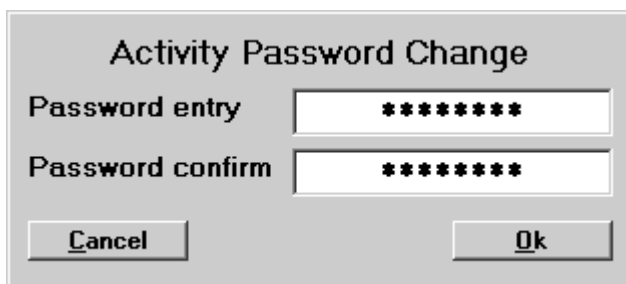
Concerns the user security from unauthorized use of the application.

Can be freely changed with the button **Change Password** (Initial: **1234**)

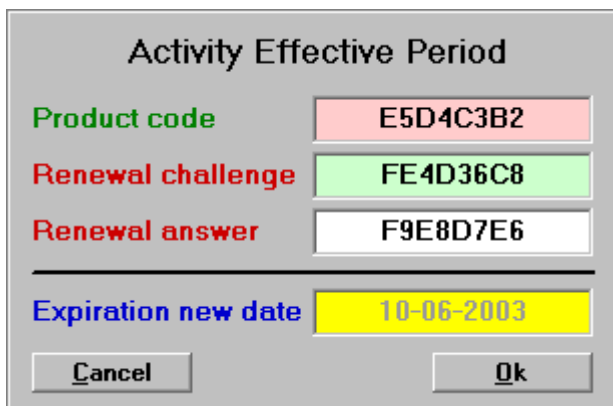
By the activation of choice **Password** ✓, it is necessary the entry of access code, each time the application is executed. Generally the password deactivation **is not recommended**.

In order to be possible the change of **password (Change Password)**, as well as the **renewal of period of use (Period)**, should has been given the valid access code and then the key **Enter** of the keyboard, **not the button Ok** of the registration screen.


The initial keyboard language is English.



The use of application is granted for **certain period of time**. The renewal screen is displayed automatically afterwards the expiry of period of legal use, or by pressing the button **Period**.

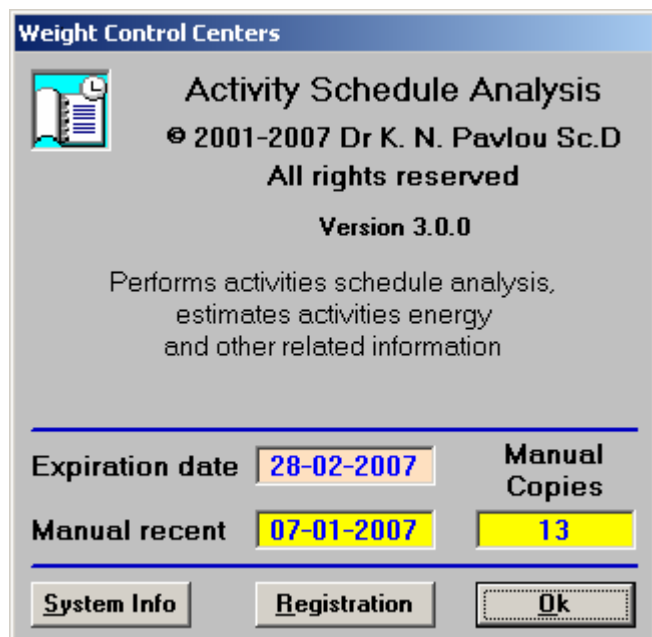


For the renewal, the user communicates with the owner of the application, it provides the **Product code** and the **Renewal challenge** and takes from him the **Renewal answer**). The renewal becomes automatically for one month (until 10 of the next month). It can be done for a longer time interval, by a special agreement, with the application owner.

Information about the license **Expiration date**, the **Manual copies** issued and the **Issue date** of the most recent manual, are shown by the **Help** menu selection  **About**.

About the application

Information is shown about the application and the system.



In the upper section presented the descriptive information on the application.

In the middle section the **expiration date** of the license of use, the **manual copies** that has been published, as well as the **issue date** of the last report are shown.

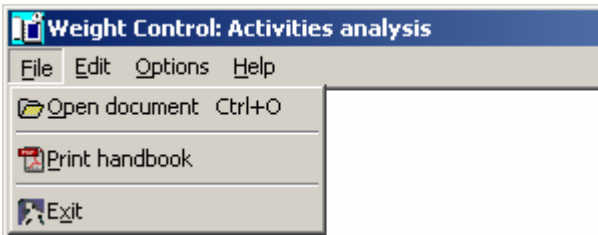
In the lower section there are the buttons:

System Info Information about the system is provided.




Registration Information for the [registration license](#) of use is given.

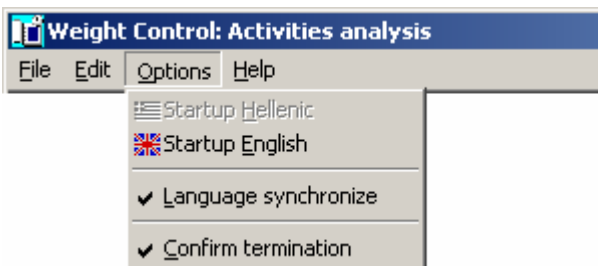
Ok Exit

End of program - Exit



The end of the application **"ACTIVITY"** can be done with the following ways:

- By the Exit button  at the status bar of the application.
- By the selection **File** → **Exit** on Menu.
- By the button **x Close** (or **{Alt+F4}**) at the picture  on the application's title bar.
- By the button  on the application's title bar.



Provided that the option **✓ Confirm termination** has been activated on the **(menu: → Options)**, the exit must be verified by the user.

Weight Control

ΚΕΝΤΡΑ ΕΛΕΓΧΟΥ ΒΑΡΟΥΣ

Activities program analysis

Activities program

No	Duration minutes	Energy kcal	Activity description
	100	1.002	Totals for weight (kg): 90,0 Gender: Man
01	20	210	Bicycling, stationary, general
02	15	158	Rowing, stationary, ergometer, general
03	25	289	Mountain climbing, with 11 pound load
04	20	180	Swimming, leisurely, not lap swimming, general
05	20	165	Health club exercise, general